

# Water Levels and Artesian Pressures in Observation Wells in the United States in 1951

## Part 3. North-Central States

*Prepared under the direction of A. N. SAYRE, Chief, Ground Water Branch*

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*Prepared in cooperation with the States  
of Iowa, Kansas, Minnesota, Nebraska,  
North Dakota, and Wisconsin, and other  
agencies*



**UNITED STATES DEPARTMENT OF THE INTERIOR**

**Douglas McKay, *Secretary***

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#### **PREFACE**

This report was prepared by the Geological Survey in cooperation with the States of Iowa, Kansas, Minnesota, Nebraska, North Dakota, and Wisconsin, and other agencies, by personnel of the Water Resources Division under the direction of:

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## CONTENTS

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	Page
<b>Introduction, by A. N. Sayre . . . . .</b>	<b>1</b>
<b>Illinois, by J. B. Cooper . . . . .</b>	<b>3</b>
Scope of water-level program . . . . .	3
Precipitation . . . . .	3
Interpretation of water-level fluctuations . . . . .	3
Well description and water-level measurements . . . . .	4
<b>Iowa, by J. B. Cooper, C. W. Lane, and H. G. Hershey . . . . .</b>	<b>5</b>
Scope of water-level program . . . . .	5
Precipitation . . . . .	5
Interpretation of water-level fluctuations . . . . .	5
Well-numbering system . . . . .	10
Well descriptions and water-level measurements . . . . .	10
<b>Kansas, by Betty J. Mason, LaVonne Godwin, and W. W. Wilson . . . . .</b>	<b>39</b>
Scope of water-level program . . . . .	39
Precipitation . . . . .	39
Well-numbering system . . . . .	39
Well descriptions and water-level measurements . . . . .	39
<b>Minnesota, by Robert Schneider . . . . .</b>	<b>98</b>
Scope of water-level program . . . . .	98
Precipitation . . . . .	98
Interpretation of water-level fluctuations . . . . .	98
Acknowledgments . . . . .	98
Well-numbering system . . . . .	98
Well descriptions and water-level measurements . . . . .	99
<b>Missouri, by J. B. Cooper . . . . .</b>	<b>106</b>
Scope of water-level program . . . . .	106
Interpretation of water-level fluctuations . . . . .	106
Well-numbering system . . . . .	106
Well descriptions and water-level measurements . . . . .	106
<b>Nebraska, by C. F. Keech . . . . .</b>	<b>109</b>
Scope of water-level program . . . . .	109
Precipitation . . . . .	109
Pumpage . . . . .	109
Interpretation of water-level fluctuations . . . . .	112
Well-numbering system . . . . .	112
Well descriptions and water-level measurements . . . . .	112
<b>North Dakota, by P. D. Akin and G. A. LaRocque, Jr. . . . .</b>	<b>161</b>
Scope of water-level program . . . . .	161
Precipitation . . . . .	161
Interpretation of water-level fluctuations . . . . .	161
Well-numbering system . . . . .	161
Well descriptions and water-level measurements . . . . .	167
<b>South Dakota, by Ronald S. Stulik . . . . .</b>	<b>186</b>
Scope of water-level program . . . . .	186
Precipitation . . . . .	186
Interpretation of water-level fluctuations . . . . .	186
Well-numbering system . . . . .	190
Well descriptions and water-level measurements . . . . .	190
<b>Wisconsin, by W. J. Drescher . . . . .</b>	<b>201</b>
Scope of water-level program . . . . .	201
Precipitation . . . . .	201
Pumpage . . . . .	201
Interpretation of water-level fluctuations . . . . .	201
Acknowledgments . . . . .	201
Well-numbering system . . . . .	201
Well descriptions and water-level measurements . . . . .	209

	Page
Figure 1. Outline map of the United States showing areas included in each of the six water-supply papers on water levels and artesian pressures in observation wells in 1951. . . . .	2
2. Fluctuations of water level in well 16-9-9 at Princeton, Illinois and monthly precipitation at Tiskilwa, November 1942 to December 1951. . . . .	3
3. Location of observation wells in Iowa, 1951. . . . .	6
4. Water level in well 68-38-7N1 and precipitation at Shenandoah, Tarkio Creek Valley, Iowa-Missouri, April 1934 to December 1951. . . . .	7
5. Water level in well 87-28-29N1 near Harcourt and monthly precipitation at Fort Dodge, Iowa, October 1942 to December 1951. . . . .	8
6. Water level in well 84-6-20N1 near Marion and monthly precipitation at Cedar Rapids, Iowa, April 1940 to December 1951. . . . .	9
7. Hydrograph of well 83-7-21K1 at Cedar Rapids, Linn County, Iowa, from August 1943 to December 1951 showing fluctuations of water level caused by pumping in vicinity of Cedar Rapids. . . . .	10
8. Location of observation wells in western Kansas, 1951. . . . .	40
9. Location of observation wells in central Kansas, 1951. . . . .	41
10. Location of observation wells in eastern Kansas, 1951. . . . .	42
11. Location of observation wells in parts of Harvey and Sedgwick Counties, Kans., 1951. . . . .	43
12. Location of observation wells in Nebraska, 1951. . . . .	110
13. Weighted average water levels in selected wells in the lower Platte River valley, Nebraska. . . . .	113
14. Location of observation wells in northeastern North Dakota, 1951. . . . .	162
15. Location of observation wells in northwestern North Dakota, 1951. . . . .	163
16. Location of observation wells in southwestern North Dakota, 1951. . . . .	164
17. Location of observation wells in southeastern North Dakota, 1951. . . . .	165
18. Average monthly water levels in selected wells in North Dakota, 1937-51. . . . .	166
19. Location of observation wells in South Dakota, 1951. . . . .	187
20. Water levels in selected wells in eastern South Dakota, 1951. . . . .	188
21. Water levels in selected wells in the Rapid Valley area, South Dakota, 1951. . . . .	189
22. Location of observation wells in southwestern Wisconsin, 1951. . . . .	202
23. Location of observation wells in southeastern Wisconsin, 1951. . . . .	203
24. Location of observation wells in northeastern Wisconsin, 1951. . . . .	204
25. Location of observation wells in northwestern Wisconsin, 1951. . . . .	205
26. Location of observation wells in north-central Wisconsin, 1951. . . . .	206
27. Water levels in selected wells in eastern Wisconsin, 1951. . . . .	207
28. Water levels in wells Mr-28, Ml-148, Dn-4, and Mo-2, Wisconsin. . . . .	208

WATER LEVELS AND ARTESIAN PRESSURES  
IN OBSERVATION WELLS IN THE UNITED STATES  
IN 1951

**Part 3. NORTH-CENTRAL**

**Introduction**

By A. N. Sayre

The publication of records of water levels and artesian pressures annually in the United States was begun by the Geological Survey in 1935. Prior to 1940 the records for each year were published in a single volume--1935, 777; 1936, 817; 1937, 840; 1938, 845; 1939, 886. Since 1940 records have been published in six volumes, covering the northeastern, southeastern, north-central, south-central, northwestern, and southwestern sections of the country. Hawaii is included in the southwestern section. The following table gives the numbers of Water-Supply Papers from 1940 through 1951.

Year	North-eastern (1)	South-eastern (2)	North-central (3)	South-central (4)	North-western (5)	South-western (6)
1940	906	907	908	909	910	911
1941	936	937	938	939	940	941
1942	944	945	946	947	948	949
1943	986	987	988	989	990	991
1944	1016	1017	1018	1019	1020	1021
1945	1023	1024	1025	1026	1027	1028
1946	1071	1072	1073	1074	1075	1076
1947	1096	1097	1098	1099	1100	1101
1948	1126	1127	1128	1129	1130	1131
1949	1156	1157	1158	1159	1160	1161
1950	1165	1166	1167	1168	1169	1170
1951	1191	1192	1193	1194	1195	1196

The objectives of the observation-well program are to provide a day-to-day evaluation of available ground-water supplies, to facilitate the prediction of trends in ground-water levels that will indicate the probable status of important ground-water supplies in the future, to delineate present or potential areas of detrimentally high or low ground-water levels, to aid in the prediction of the base flow of streams, to determine the several forces that act on a ground-water body, and to demonstrate the interplay of those forces in the ground-water regimen, to furnish information for use in basic research, and to provide long-term continuous records of fluctuations of water levels in representative wells. These selected records serve as a framework to which many short-term records collected during an intensive investigation may be related.

Water levels in wells are seldom stationary but move up or down a fraction of an inch or many feet within a short time. Water-table wells may be influenced by direct recharge from precipitation, withdrawals from wells or springs, evapotranspiration by vegetation, evaporation from the soil, and by changes in atmospheric pressure. Artesian wells are influenced over large areas by changes in the rate of pumping from other wells, changes in atmospheric pressure, earthquakes, ocean tides, earth tides, and by recharge from precipitation, although the recharge may not be noticeable immediately. When accurate comparisons of water levels are made it is desirable to apply corrections for these influences, several of which may be compensating or additive depending upon the conditions at those particular times.

Water-level measurements are given in feet with reference to land-surface datum or sea-level datum. Land-surface datum is a precise datum plane that is approximately at land surface at each well. Mean sea level (msl) is the datum plane on which the national network of precise levels is based. When some measurements in a table are above and others are below the plane of reference, a plus (+) or minus (-) sign is placed immediately preceding the first entry in each column. Readings between minus signs are below the plane of reference and those between plus signs are above the plane of reference.

For the most part, discussions of precipitation in this report are based on data furnished by the United States Weather Bureau.

Measurements of water levels and artesian pressures in wells were made under the direction of the district supervisors of the Ground Water Branch in the several States. Verda M. Dougherty edited the reports; Rodney Hart edited the illustrations; and Penn Livingston had

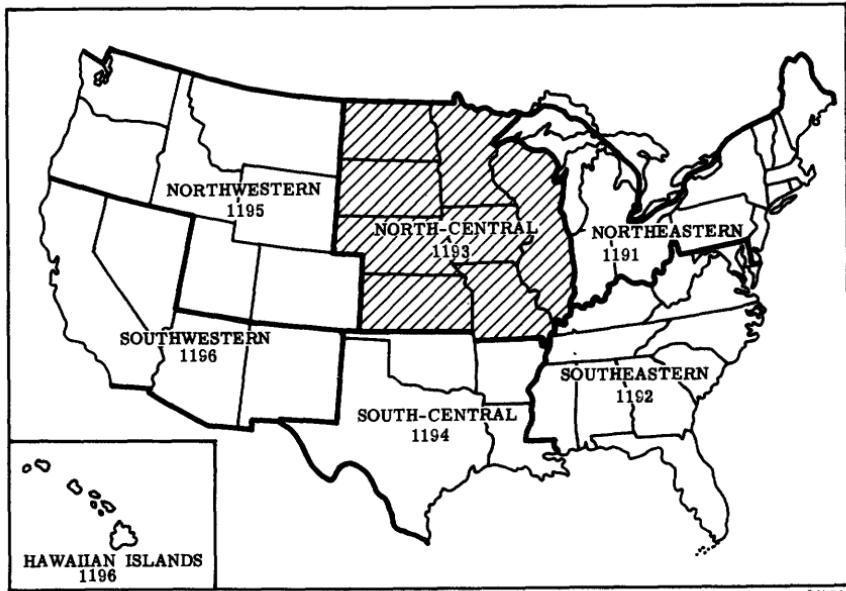


Figure 1. --Outline map of the United States showing areas included in each of the six water-supply papers on water levels and artesian pressures in observation wells in 1951. The shaded area indicates the States included in this volume.

general charge of the nation-wide observation-well program. This volume was typed by Mrs. Joyce Wells and completed by Mrs. Bettie Morton.

## ILLINOIS

By J. B. Cooper

### Scope of Water-Level Program

Measurements of water level were continued in 1951 in the well at Princeton, Bureau County. This well is equipped with a nonrecording gage, which was installed in November 1942; observations have been made at approximately weekly intervals since that time. A total of 50 measurements was made in this well during 1951.

#### Precipitation

The precipitation at the nearest rainfall station in 1951, as obtained from records of the U. S. Weather Bureau, was 41.13 inches, 6.68 inches above normal. Below-normal precipitation occurred in January, June, July, and September; during the remaining months it was above normal.

#### Interpretation of Water-Level Fluctuations

During the first half of 1951, the water level in the well at Princeton followed the general pattern of previous years, as indicated by figure 2. The second half of the year was marked by unusually high water levels which occurred in each month from July through December and were the highest month-end water levels of record. The high of 4.59 feet recorded on April 14 was 0.20 foot higher than the 1950 high. The low of 17.59 feet recorded on February 3 was 0.79 foot higher than the 1950 low. The range of fluctuation during 1951 amounted to 13.0 feet.

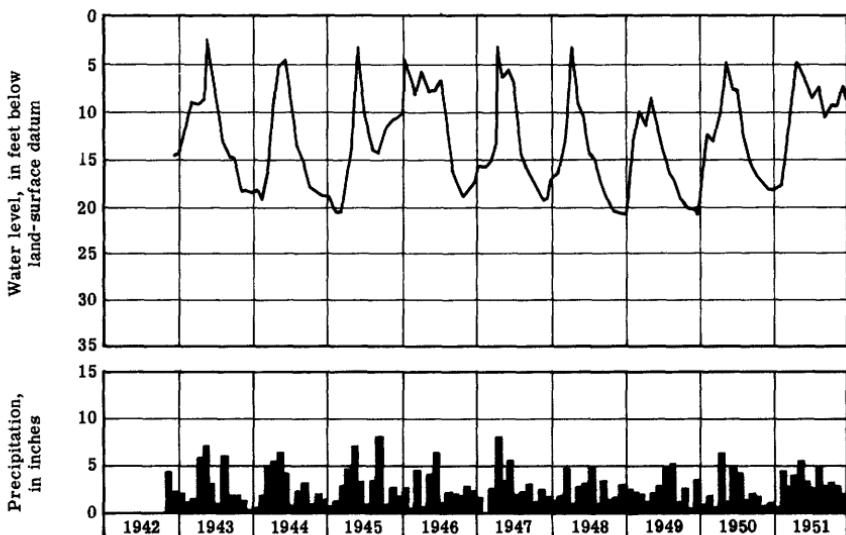


Figure 2. --Fluctuations of water level in well 16-9-9 at Princeton, Ill., and monthly precipitation at Tiskilwa, November 1942 to December 1951.

## Well Description and Water-Level Measurements

Bureau County

16-9-9. R. E. Neff. 326 First St., Princeton. Dug unused water-table well in glacial drift, diameter 32 inches, depth 29 feet, cribbed with brick. Highest water level 2.94 below lsd, May 15, 1943; lowest 20.99 below lsd, Dec. 25, 1948, Dec. 17, 1949. Records available: 1942-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	16.79	Apr. 7	6.68	July 7	9.71	Oct. 6	11.00
13	17.29	14	4.59	14	6.00	13	10.73
20	17.29	21	6.28	21	7.39	20	9.50
27	17.55	28	5.38	Aug. 4	8.80	Nov. 3	8.51
Feb. 3	17.59	May 5	6.39	11	8.49	10	9.11
10	17.56	12	5.19	18	9.61	17	9.39
17	14.59	19	6.00	25	10.79	24	7.19
24	13.41	26	6.85	Sept. 1	7.15	Dec. 1	7.55
Mar. 3	11.84	June 2	7.99	8	9.11	9	8.00
10	12.11	9	8.80	15	9.71	15	8.41
17	11.11	16	9.85	22	10.99	22	8.61
24	8.71	22	7.41	29	9.10	29	9.10
31	6.59	30	8.60				

## IOWA

By J. B. Cooper, C. W. Lane, and H. G. Hershey

### Scope of Water-Level Program

The observation-well program in Iowa was continued in 1951 in cooperation with the State Geological Survey. Measurements were made in 154 wells, 19 of which were equipped with recording gages. (See fig. 3.) The publication of data for 50 observation wells for which measurements have been published in previous annual water-level reports and for which no measurements appear in this report has been discontinued in the annual water-level reports. The shallow observation wells in the Tarkio Creek Valley area of southwestern Iowa and northwestern Missouri, including parts of Montgomery and Page Counties, Iowa, and Atchison County, Missouri, constitute a unit in the Iowa measurement program. There are 18 wells in Page County and 5 wells in Montgomery County. Records of wells in the Missouri part of the area are given in the section of this report that deals with that State.

### Precipitation

The average total precipitation over the State in 1951, as reported by the U. S. Weather Bureau, was 42.22 inches, 10.85 inches above normal. In January, precipitation was only slightly more than one-half the normal amount for the month and was the fourth consecutive month with below-normal precipitation. Water supplies became very short in the rural sections of approximately 20 counties in south-central Iowa. A wet period started late in February, bringing far above-normal precipitation to the State for every month from February through August. Considerable local flooding of low-lying agricultural areas occurred in this period, and previous high-stage records were exceeded at several points along the Mississippi River. Precipitation was slightly deficient in September, November, and December.

### Interpretation of Water-Level Fluctuations

Water levels in shallow aquifers in Iowa fluctuate generally in response to variations in precipitation, pumping, and natural demands of vegetation. Ground-water levels in these aquifers in 1951 were at unusually high levels throughout almost all of the State. Because of the above-normal precipitation surface water was plentiful, pumping demands were diminished, and vegetation depended less upon the ground-water supply. Water levels in shallow observation wells throughout Iowa rose during 1951 to positions about 3.5 feet higher on an average than in 1950; some were as much as 7.5 feet higher and nearly all at least 1 foot higher. Water-level fluctuations in well 68-38-7N1, shown in figure 4, are representative of variations in depth-to-water with precipitation in the wells in the Tarkio Creek Valley area of southwestern Iowa. This well is used because of its length of record and favorable location away from pumping influences. Monthly precipitation at Shenandoah is also shown on the graph. The fluctuations of the water level in well 87-28-29N1, representative of shallow observation wells and domestic farm wells which tap the same water-bearing bed, are shown in figure 5. The monthly precipitation at Fort Dodge, shown also on the graph, correlates closely with the fluctuations of water level. Figure 6 shows the depth to the water table in well 84-6-20N1, in glacial drift. Close correlation between precipitation and the water-level fluctuations in this well is evident. Well 83-7-21K1 (fig. 7) is illustrative of artesian rock wells affected by seasonal withdrawals for industrial and air-conditioning purposes. This is an unused well, completed at a depth of 156 feet in the upper part of dolomite of Silurian age, which is locally about 400 feet thick. In September 1951 a new well was constructed nearby. A pumping test made on it had a marked effect upon water levels in well 83-7-21K1. On December 31, 1951, the water level was 64.13 feet, which is 6.91 feet below its stage of December 31, 1943.

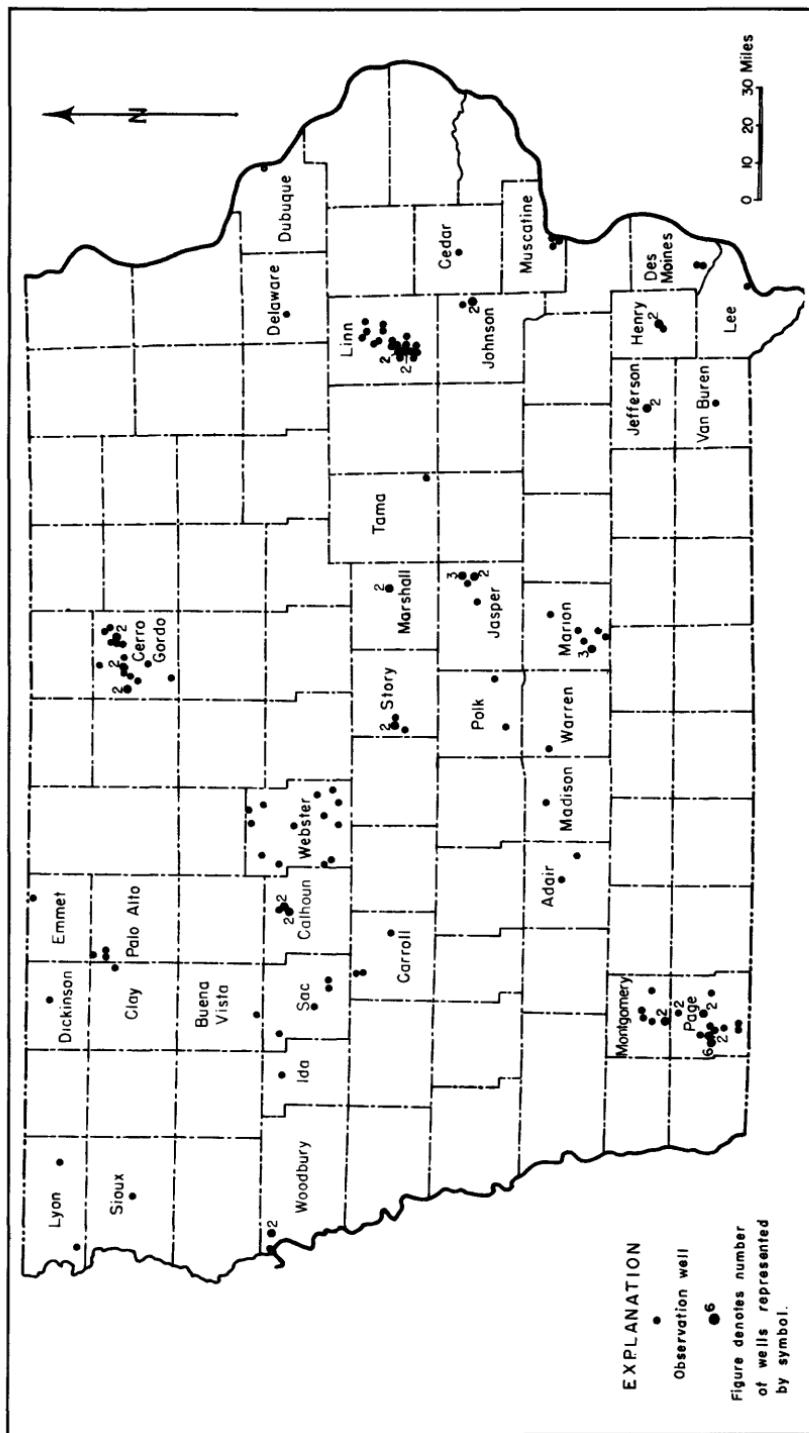


Figure 3.--Location of observation wells in Iowa, 1951.

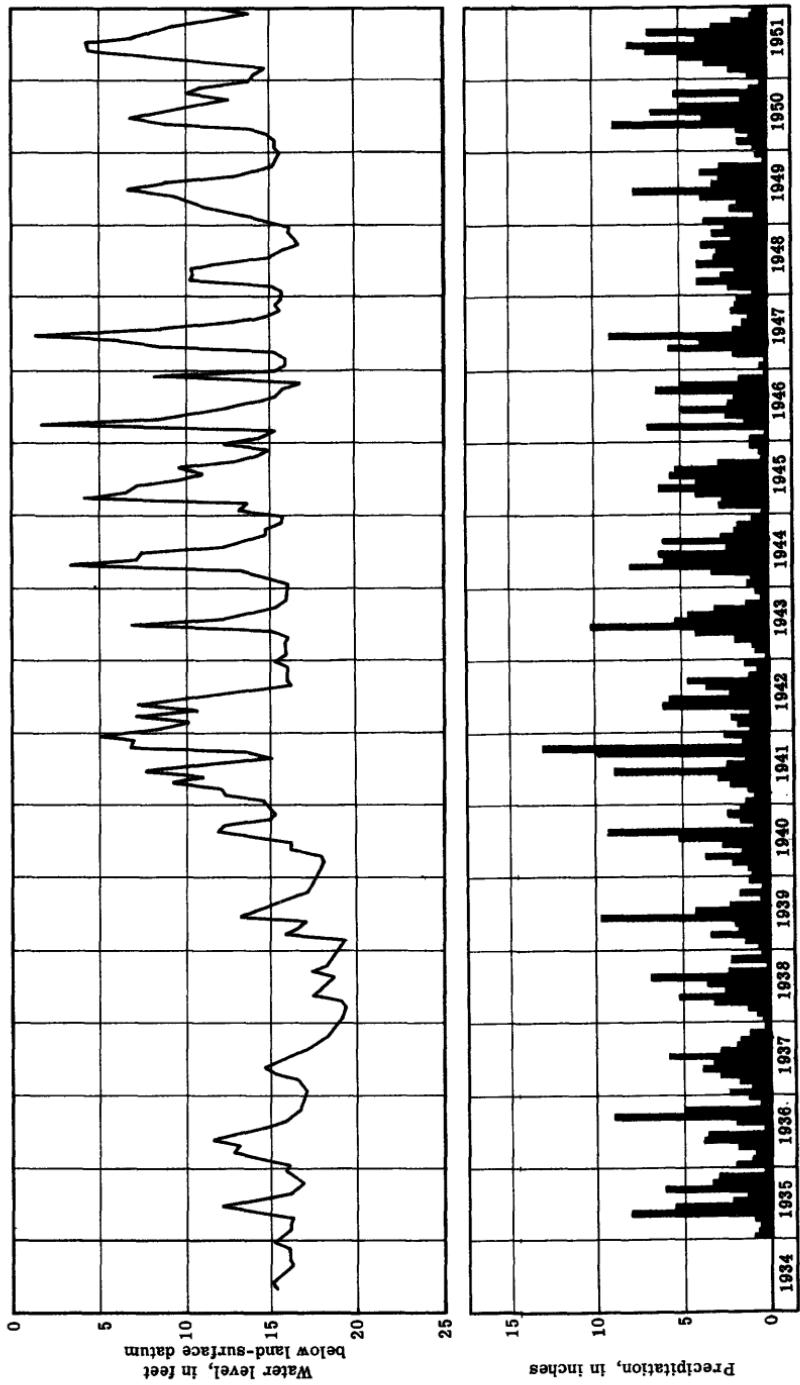


Figure 4. --Water level in well 68-38-TN1 and precipitation at Shenandoah, Tarkio Creek Valley, Iowa-Missouri, April 1934 to December 1951.

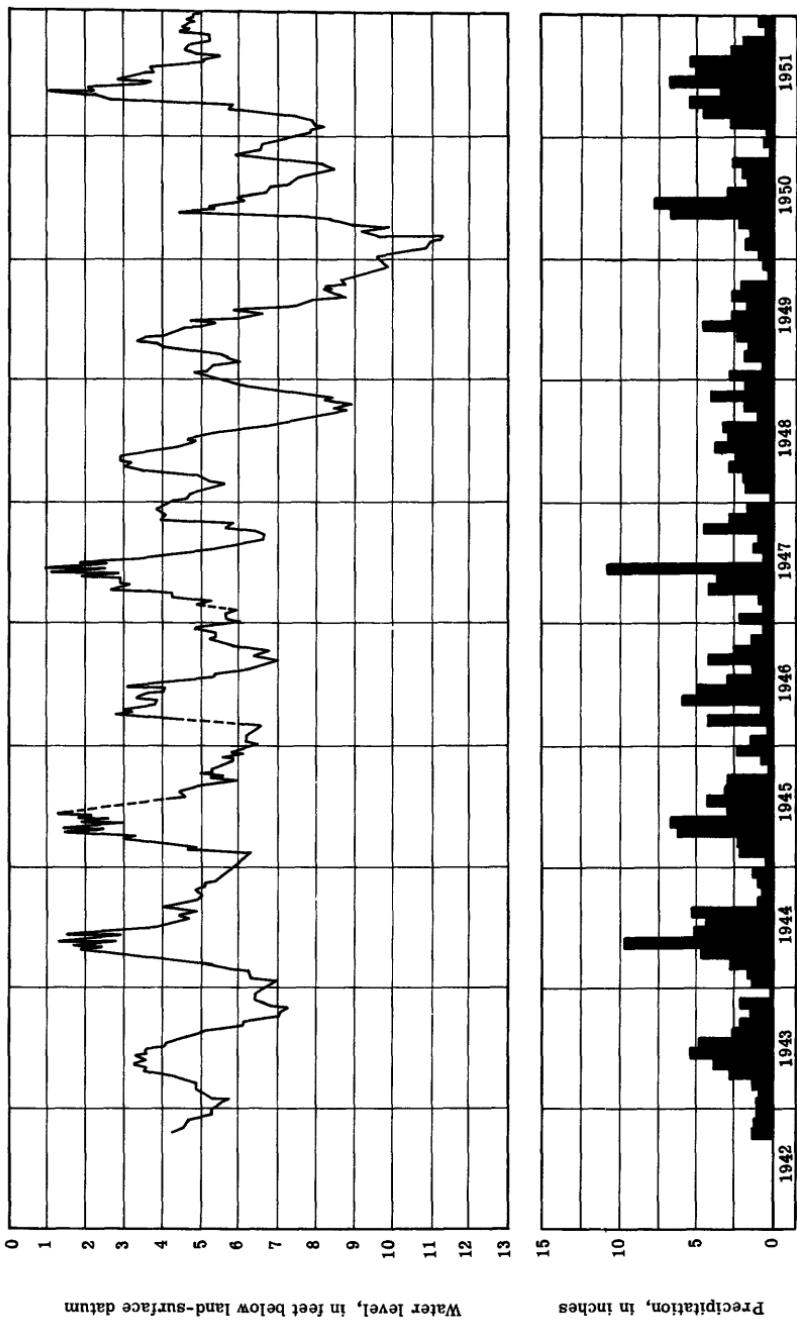


Figure 5.--Water level in well 87-28-29N1 near Harcourt and monthly precipitation at Fort Dodge, Iowa, October 1942 to December 1951.

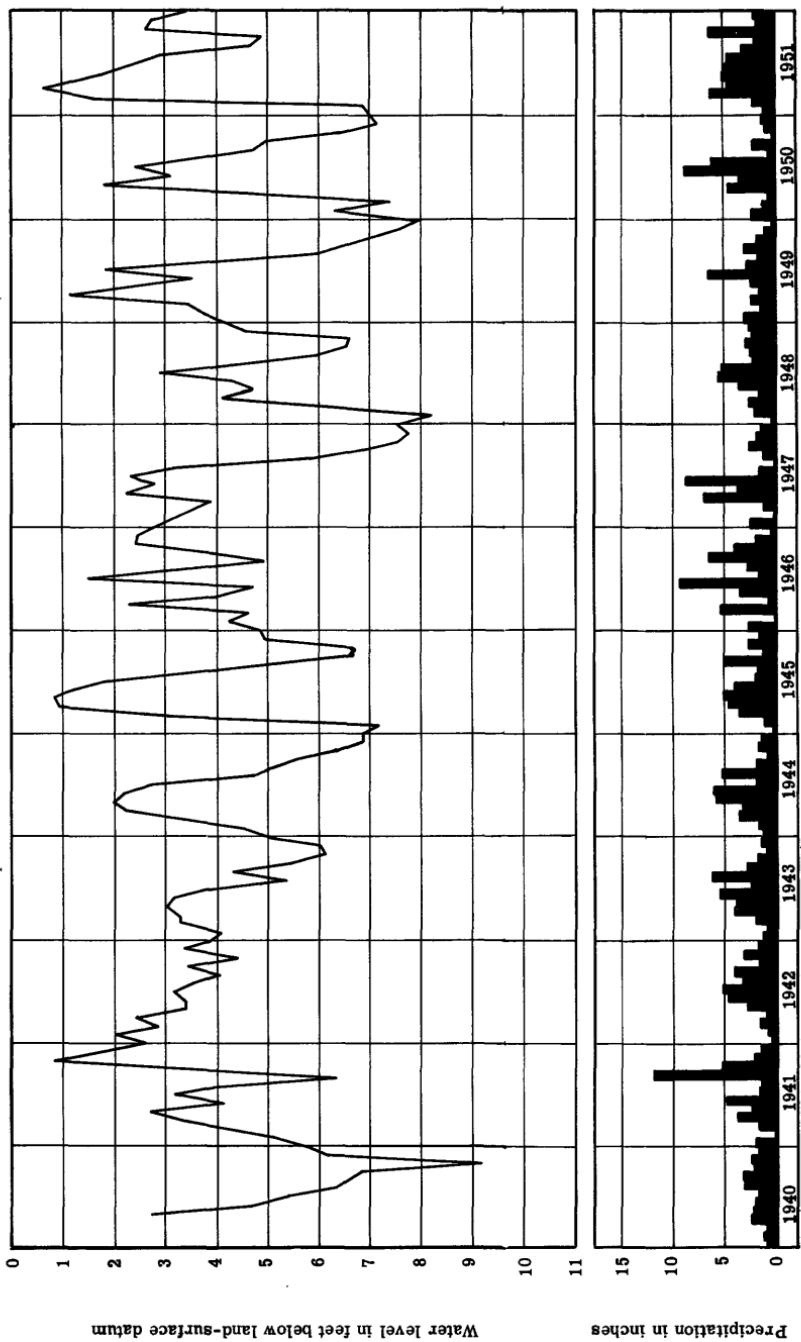


Figure 6.--Water level in well 84-6-20N1 near Marion and monthly precipitation at Cedar Rapids, Iowa, April 1940 to December 1951.

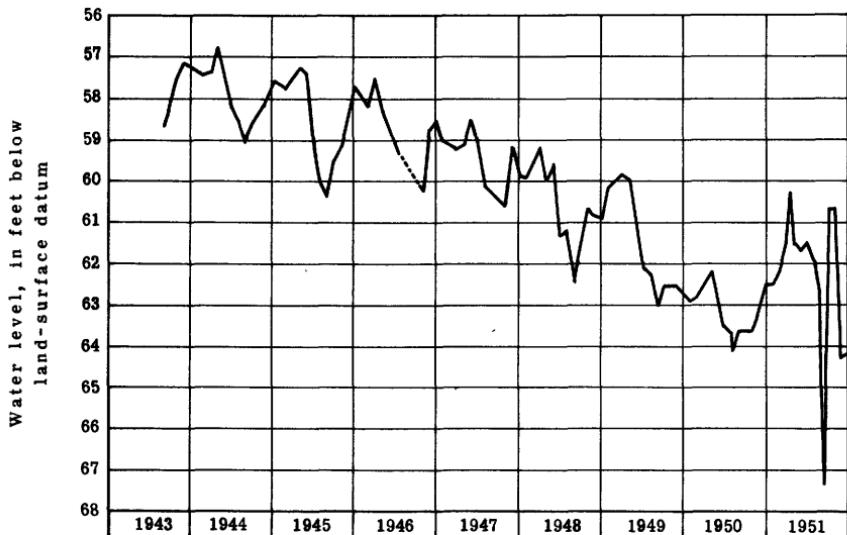


Figure 7.--Hydrograph of well 83-7-21K1 at Cedar Rapids, Linn County, Iowa, from August 1943 to December 1951, showing fluctuations of water level caused by pumping in the vicinity of Cedar Rapids.

#### Well-Numbering System

The numbers assigned to observation wells in Iowa show the location of the wells according to the rectangular system for subdivision of public land. Each well number is made up of three segments, separated by hyphens. The first and second segments indicate the township and range. The third segment includes the section, followed by a letter representing the 40-acre subdivision of the section, as shown by the following diagram, and the serial number of the particular well. The letter E is added to the second segment representing the range when a well is east of the fifth principal meridian. For other wells, it is understood that the range indicated is west of the meridian. For example, the number 76-31-25P1 indicates a well in T. 76 N., R. 31 W., in the SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 25, serial number 1.

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

#### Well Descriptions and Water-Level Measurements

Water levels are in feet below land-surface datum unless otherwise indicated. When some measurements in a table are above and others below the plane of reference, a plus (+) or minus (-) sign is placed immediately preceding the first entry in each column of each mixed table. Readings between minus (-) signs are below the plane of reference, and those between plus (+) signs are above the plane of reference.

Adair County

76-31-29F1. Mutual Benefit Life Insurance Co. Dug unused water-table well in glacial drift, diameter 36 inches, depth 21 feet, cribbed with rock. Highest water level 3.96 below lsd, May 26, 1942; lowest 16.55 below lsd, Dec. 21, 1950. Records available: 1942-51. Mar. 28, 11.50; June 21, 4.77; Sept. 13, 8.20.

75-30-17E1. F. E. Robert. Drilled unused water-table well in glacial drift, diameter 12 inches, depth 26 feet, lined with tile. Highest water level 0.18 above lsd, Mar. 23, 1943; lowest 2.60 below lsd, Sept. 8, 1945. Records available: 1942-51. Mar. 28, +0.05; June 21, +0.02; Sept. 13, +0.00.

Buena Vista County

90-37-34B1. Ed Zinn. Dug unused water-table well in glacial drift, diameter 36 inches, depth 29 feet. Highest water level 3.77 below lsd, Oct. 15, 1946; lowest 18.32 below lsd, Aug. 27, 1941. Records available: 1940-51. Apr. 3, 9.85; June 26, 4.99; Oct. 2, 6.32.

Calhoun County

89-32-28N1. Frank Laird. Drilled unused water-table well in glacial drift, diameter 15 inches, depth 11 feet, lined with tile. Highest water level 2.03 below lsd, May 1, 1947; lowest dry Oct. 2, 1940, Aug. 27, 1941. Records available: 1940-51. Apr. 4, 2.70; June 27, 2.99; Oct. 3, 3.49.

89-32-33F1. State Conservation Commission. Drilled domestic water-table well in glacial drift, diameter 8 inches, depth 53 feet, lined with tile. Highest water level 9.88 below lsd, Oct. 3, 1951; lowest 20.35 below lsd, June 21, 1950. Records available: 1948-51. Apr. 4, 14.75; June 27, 16.02; Oct. 3, 9.88.

89-32-33N1. Ben Burns. Drilled domestic water-table well in glacial drift, diameter 8 inches, depth 30 feet, lined with tile. Highest water level 1.68 below lsd, Mar. 29, 1945; lowest 20.53 below lsd, Oct. 2, 1940. Records available: 1940-49. No measurement made in 1951.

88-33-1B1. Ben Burns. Drilled domestic water-table well in glacial drift, diameter 14 inches, depth 35 feet, lined with tile. Highest water level 7.16 below lsd, Apr. 27, 1948; lowest 17.12 below lsd, Dec. 17, 1942. Records available: 1940-50. No measurement made in 1951.

88-33-1D1. Bernard Kutz. Drilled unused water-table well in sand of Pleistocene age, diameter 14 inches, depth 105 feet, lined with tile. Highest water level 5.08 below lsd, July 1, 1945; lowest 14.05 below lsd, Dec. 20, 1950. Records available: 1940-51. Apr. 4, 13.68; June 27, 5.29; Oct. 3, 7.78.

Carroll County

85-35-7N1. City of Breda. Drilled municipal artesian well in Dakota sandstone, diameter 10 to 6 inches, depth 340 feet, screen 320-340. Land-surface datum is about 1,362 feet above msl. Highest water level 187.70 below lsd, Mar. 25, 1948; lowest 219.38 below lsd, June 20, 1950. Records available: 1942-51. Oct. 2, 188.65.

85-35-18D1. City of Breda. Drilled unused artesian well in Dakota sandstone, diameter 9 inches, reported depth 350 feet. Land-surface datum is about 1,365 feet above msl. Highest water level 190.47 below lsd, Oct. 6, 1948; lowest 206.55 below lsd, May 27, 1941. Records available: 1940-51. Apr. 3, 193.29; June 26, 193.02; Oct. 2, 191.18.

84-34-25F1. City of Carroll test hole 1. Drilled observation artesian well in Dakota sandstone, diameter 8 inches, depth 120 feet, cased to 106. Highest water level 34.55 below lsd, Sept. 8, 1945; lowest 51.24 below lsd, July 28, 1941. Records available: 1939-49. No measurement made in 1951.

Cedar County

80-2-6D1. City of Tipton. Drilled unused artesian well in limestone of Ordovician and Silurian ages, diameter 8 inches, reported depth 1,000 feet, cased to 225. Land-surface datum is about 815 feet above msl. Water levels affected by pumping of nearby wells. Highest water level 55.2 below lsd, Aug. 14, 1950; lowest 118.8 below lsd, Mar. 26, 1951. Records available: 1949-51.

80-2-6D1--Continued.

## Daily highest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	Nov.	Dec.
1	....	58.3	58.2	59.3	....	58.3
2	....	58.4	57.9	58.6	....	56.9
3	....	58.4	57.7	....	....	56.0
4	....	58.4	58.2	....	....	56.1
5	....	58.5	57.9	....	....	56.7
6	....	58.2	57.6	....	....	56.3
7	....	58.8	58.2	....	....	56.2
8	....	58.4	57.9	....	....	57.3
9	....	58.5	58.2	....	....	57.0
10	....	58.5	57.9	....	....	57.2
11	....	58.4	57.9	....	....	57.1
12	....	58.4	58.2	....	....	56.1
13	....	58.9	57.6	....	....	56.7
14	....	59.0	57.3	....	....	56.3
15	....	59.2	57.6	....	....	56.6
16	....	58.5	57.9	....	....	57.0
17	....	58.7	57.9	....	58.8	56.1
18	....	58.7	57.6	....	58.1	57.3
19	....	58.2	59.4	....	56.8	58.4
20	58.2	58.1	58.9	....	56.7	58.7
21	58.8	58.2	58.9	....	56.7	57.4
22	58.3	58.5	59.0	....	56.8	58.0
23	57.9	58.6	58.6	....	57.0	57.2
24	58.7	58.7	59.0	....	7.8	56.8
25	58.5	57.9	58.8	....	56.8	59.2
26	58.7	57.8	64.7	....	56.6	57.1
27	58.4	57.7	59.2	....	56.8	57.9
28	59.1	57.9	58.7	....	57.4	57.5
29	58.7		58.6	....	58.6	58.6
30	58.7		60.5	....	57.3	56.9
31	58.4		58.8	....		56.4

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	Nov.	Dec.
1	....	116.9	115.8	117.3	....	92.1
2	....	117.1	117.0	117.1	....	90.5
3	....	117.1	116.7	....	....	92.1
4	....	117.1	117.0	....	....	93.2
5	....	116.8	116.1	....	....	....
6	....	117.2	116.7	....	....	91.2
7	....	117.5	116.9	....	....	93.2
8	....	116.5	116.7	....	....	93.3
9	....	117.5	116.9	....	....	91.7
10	....	116.9	116.8	....	....	91.8
11	....	116.9	117.1	....	....	91.3
12	....	117.2	117.0	....	....	92.8
13	....	117.3	116.6	....	....	92.5
14	....	117.8	115.6	....	....	92.4
15	....	116.4	117.1	....	....	93.2
16	....	117.2	116.8	....	93.0	90.9
17	....	117.4	116.6	....	93.7	93.2
18	....	115.0	117.6	....	91.4	93.6
19	116.2	116.1	117.6	....	92.9	93.1
20	117.2	117.0	117.5	....	93.0	....
21	116.5	117.0	117.8	....	92.9	91.7
22	116.7	117.3	117.8	....	93.0	93.5
23	117.3	117.4	117.5	....	92.8	91.6
24	117.2	117.1	117.7	....	92.7	94.4
25	117.4	116.6	118.5	....	92.3	....
26	116.9	116.1	118.8	....	93.0	94.2
27	117.6	117.2	116.9	....	93.3	94.1
28	117.3	116.7	117.3	....	93.0	93.3
29	117.1		118.0	....	90.9	92.0
30	117.2		117.6	....	93.1	90.8
31	117.3		117.6	....		92.7

Cerro Gordo County

97-21-9E1. E. H. Phillips. Drilled domestic and stock artesian well in limestone of Devonian age, diameter 5 inches, depth 206 feet, cased to 94. Land-surface datum is about 1,217 feet above msl. Highest water level 90.60 below lsd, Dec. 27, 1949; lowest 100.19 below lsd, July 19, 1948. Records available: 1941-51. June 28, 93.50; Oct. 4, 96.05.

97-20-24H1. Mrs. Vinnie Shanks. Drilled domestic water-table well in glacial drift, diameter 36 to 18 inches, depth 79 feet, cribbed with rock to 17 feet, lined with tile to 79 feet. Land-surface datum is 1,176 feet above msl. Highest water level 3.68 below lsd, June 28, 1951; lowest 25.28 below lsd, Sept. 28, 1950. Records available: 1941-51. Apr. 5, 8.06; June 28, 3.68; Oct. 4, 6.03.

97-20-28L1. American Crystal Sugar Co. Drilled industrial artesian well in St. Peter and Jordan sandstone, diameter 20 to 12 inches, depth 1,347 feet, cased 0-241 and 653-815. Land-surface datum is 1,162.54 feet above msl. Highest water level 148.25 below lsd, July 29, 1944; lowest 191.00 below lsd, July 16, 1948. Records available: 1943-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	187.80	May 1	185.80	June 18	188.60	Aug. 7	184.00
12	187.60	7	185.40	25	182.60	14	183.60
19	189.00	16	185.60	July 4	181.90	21	182.80
26	188.30	21	185.80	10	181.90	28	182.30
Mar. 5	187.80	29	186.40	16	181.30	Sept. 4	181.90
Apr. 9	187.20	June 4	187.30	24	183.60	11	182.50
16	187.50	11	187.40	31	184.80	15	182.60
23	185.40						

97-19-30R1. E. Stebens. Dug unused water-table well in glacial sand, diameter 36 inches, depth 16 feet, cribbed with rock. Land-surface datum is about 1,157 feet above msl. Highest water level 5.43 below lsd, July 3, 1945; lowest 13.90 below lsd, June 24, 1943. Records available: 1941-51. Apr. 5, 9.80; June 28, 5.44; Oct. 4, 8.83.

96-22-20C1. The Willow Inn. Dug unused water-table well in glacial drift, diameter 24 inches, depth 10 feet. Land-surface datum is about 1,232 feet above msl. Highest water level 1.14 below lsd, Mar. 25, 1942; lowest 8.26 below lsd, Oct. 12, 1948. Records available: 1940-51. Apr. 5, 2.76; June 28, 1.89; Oct. 4, 3.78.

96-22-20L1. Boy Scouts of America. Drilled unused water-table well in glacial drift, diameter 5 inches, depth 126 feet. Land-surface datum is about 1,249 feet above msl. Highest water level 29.65 below lsd, Mar. 25, 1942; lowest 40.68 below lsd, July 6, 1950. Records available: 1940-51. Apr. 5, 36.57; June 28, 38.23; Oct. 4, 34.77.

96-22-25D2. U. S. Geol. Survey. Clear Lake State Park. Driven observation water-table well in glacial sand and gravel, diameter 1 inch, depth 9 feet. Land-surface datum is 1,235 feet above msl. Highest water level 3.68 below lsd, July 3, 1945; lowest 8.18 below lsd, Oct. 12, 1948. Records available: 1940-51. June 28, 4.62; Oct. 4, 6.02.

96-21-13E1. Mason City & Clear Lake Railway Co. Drilled unused water-table well, diameter 5 inches, depth 29 feet. Land-surface datum is about 1,168 feet above msl. Highest water level 1.73 below lsd, June 28, 1951; lowest 8.02 below lsd, Oct. 12, 1948. Records available: 1940-51. June 28, 1.73; Oct. 4, 3.85.

96-21-17C1. Clear Lake Sand & Gravel Co. Drilled industrial water-table well in glacial sand, diameter 8 inches, depth 22 feet, sand point on bottom. Land-surface datum is about 1,203 feet above msl. Highest water level 13.13 below lsd, June 28, 1951; lowest 20.78 below lsd, Dec. 28, 1949. Records available: 1940-51. Apr. 5, 16.27; June 28, 13.13; Oct. 4, 15.97.

96-21-17M1. Sam Kennedy. Dug unused water-table well in glacial drift, diameter 24 inches, depth 5 feet, cribbed with concrete blocks. Land-surface datum is about 1,204 feet above msl. Highest water level 0.51 below lsd, June 19, 1941; lowest 3.08 below lsd, Dec. 20, 1947. Records available: 1940-51. Apr. 5, 1.95; June 28, 1.07; Oct. 4, 2.47.

96-21-18H1. Sam Kennedy. Drilled domestic water-table well in glacial drift, diameter 12 inches, depth 14 feet. Land-surface datum is about 1,211 feet above msl. Highest water level 3.45 below lsd, July 3, 1945; lowest 12.04 below lsd, Dec. 28, 1949. Records available: 1940-50. No measurement made in 1951.

96-20-31L2. Mason City well 8. Drilled municipal artesian well in Jordan sandstone, diameter 20 to 10 inches, depth 1,225 feet, cased 0-99, 349-710. Land-surface datum is 1,098.3 feet above msl. Water levels affected by pumping of nearby wells. Highest water level 155.9 below lsd, Mar. 26, 1944; lowest 297.0 below lsd, Nov. 27, 1951. Records available: 1941-46, 1950-51.

## 14 WATER LEVELS AND ARTESIAN PRESSURES, 1951, NORTH-CENTRAL STATES

96-20-3L2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	223.40	Apr. 9	228.50	July 10	208.70	Oct. 15	224.3
12	215.30		219.00		215.50		214.5
19	215.30		216.60		199.40		216.2
31	215.00		217.10		207.60		187.6
Feb. 5	211.40	May 7	217.20	Aug. 7	198.60	Nov. 6	2296.9
16	218.70		216.30		210.90		2297.0
23	217.70		218.60		210.80		a291.0
Mar. 5	206.50	June 4	215.70	Sept. 4	200.5	Dec. 4	220.6
10	212.60		217.30		225.8		a286.0
27	218.40		222.90		225.1		a281.0
Apr. 2	220.70	25	211.10				

a Pumping.

96-20-3P1. Minneapolis & St. Louis Railroad Co. Drilled unused artesian well in St. Peter sandstone, diameter 12 to 10 inches, depth 805 feet, cased 0-30, 614-730. Land-surface datum is 1,120 feet above msl. Highest water level 32.91 below lsd, May 8, 1951; lowest 55.07 below lsd, Sept. 29, 1949. Records available: 1941-51.

## Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	48.53	49.31	46.00	41.61	35.15	36.14	36.54	38.95	.....	40.46	42.11	43.01
2	48.49	49.31	45.98	41.51	34.27	36.05	36.49	39.04	.....	40.50	42.08	42.93
3	48.53	49.22	45.92	41.41	33.58	35.96	36.35	39.33	38.40	40.69	41.72	42.77
4	48.80	49.44	46.09	40.80	33.35	35.88	36.60	39.43	38.43	40.73	42.08	43.03
5	48.90	49.35	46.05	39.94	33.18	35.86	36.60	39.23	38.48	41.03	42.14	43.00
6	.....	49.37	46.07	39.15	33.21	35.83	36.65	39.20	38.65	.....	42.15	42.80
7	.....	.....	.....	38.26	32.97	35.80	36.67	39.33	38.78	.....	42.22	43.23
8	.....	49.54	.....	37.82	32.91	35.88	36.63	39.33	38.79	.....	42.15	43.39
9	.....	49.68	46.92	.....	32.99	36.05	36.61	39.44	38.75	.....	42.35	43.35
10	.....	49.46	.....	.....	32.98	36.06	36.74	39.54	38.71	.....	42.45	43.09
11	.....	49.31	.....	.....	32.97	36.07	36.69	39.70	38.85	.....	42.32	43.21
12	48.99	49.46	.....	.....	32.95	36.23	36.70	39.63	39.00	.....	41.99	43.34
13	49.03	49.83	.....	37.28	32.94	36.47	36.75	39.52	39.20	.....	41.91	43.52
14	48.82	49.83	.....	37.19	33.03	36.63	36.79	39.62	39.47	.....	42.27	43.53
15	48.98	49.72	.....	37.30	33.19	36.78	36.72	39.68	39.47	.....	42.58	43.71
16	.....	49.56	.....	37.28	33.41	36.93	36.79	39.82	39.54	.....	42.77	.....
17	.....	50.72	.....	37.20	33.61	37.14	37.04	39.92	39.45	.....	42.83	.....
18	.....	49.64	.....	37.31	33.80	37.27	37.23	40.06	39.47	.....	42.62	.....
19	48.94	49.62	46.18	37.57	33.95	37.39	37.40	39.38	39.60	.....	42.65	.....
20	49.16	49.63	46.30	37.68	34.16	37.67	37.38	39.08	39.71	41.48	42.51	.....
21	49.28	49.65	46.15	37.44	34.34	37.80	37.47	39.03	39.98	41.42	42.50	43.68
22	48.76	49.71	46.20	37.48	34.57	37.88	37.61	38.97	39.98	41.58	42.69	.....
23	49.06	49.60	46.33	37.34	34.75	37.91	37.65	38.89	40.06	41.60	42.66	.....
24	49.24	49.45	46.41	37.18	34.85	.....	37.74	38.83	40.15	41.62	42.82	.....
25	49.28	48.79	46.10	37.08	35.04	.....	37.85	.....	40.22	41.65	42.58	.....
26	49.14	47.50	46.14	37.00	35.15	.....	38.01	.....	39.98	41.89	42.87	.....
27	49.31	46.62	45.69	36.50	35.25	.....	38.21	.....	40.48	41.78	42.74	.....
28	49.37	45.78	44.71	36.26	35.52	.....	38.46	.....	40.70	41.74	42.93	.....
29	49.36	43.18	35.79	35.67	36.69	38.55	.....	40.52	41.57	42.97	.....	.....
30	49.31	42.17	35.40	35.88	36.60	38.56	.....	40.49	41.74	43.00	.....	.....
31	49.27	41.68	35.95	.....	38.83	.....	.....	41.98	.....	.....	.....	.....

96-20-9J1. Glen Swartz. Drilled unused artesian well in limestone of Devonian age, diameter 10 inches, depth 195 feet, cased 0-19. Land-surface datum is about 1,117 feet above msl. Highest water level 3.85 below lsd, Apr. 17, 1951; lowest 12.47 below lsd, Feb. 6, 1951. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level	
Jan. 9	11.70	May 2	4.26	July 17	6.63	Oct. 8	10.45	
13	11.90		5.41		8.58		10.54	
23	12.00		5.25		9.02		10.63	
31	12.07		7.18		9.36		10.74	
Feb. 6	12.47	June 6	7.84	Aug. 7	9.39	Nov. 6	10.82	
14	12.44		6.98		7.79		10.72	
21	11.17		8.43		7.55		11.13	
27	10.47	19	8.53	Sept. 4	7.54	Dec. 4	11.08	
Mar. 7	8.54	26	7.58		8.02		11	10.71
Apr. 17	3.85	July 5	5.88		9.42		18	11.13
25	5.23	10	7.09	Oct. 2	10.44	26	11.13	

96-20-16J1. Mason City well 11. Drilled artesian well in Jordan sandstone, diameter 20 to 10 inches, depth 1,306 feet, cased 0-143 and 713-900. Land-surface datum is about 1,168 feet above msl. Highest water level 162.23 below lsd, June 25, 1942; lowest 284.20 below lsd, Sept. 8, 1948. Records available: 1939-43, 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	223.50	Mar. 10	221.70	May 7	218.80	Nov. 13	220.50
12	222.80	27	219.30	June 19	2273.80	19	222.30
22	222.10	Apr. 2	219.70	Oct. 2	221.30	27	220.90
26	222.30	9	219.30	8	222.00	Dec. 4	221.00
Feb. 5	221.10	17	219.60	15	213.90	11	222.20
16	226.80	23	219.40	22	222.00	18	221.80
23	222.80	30	219.20	Nov. 6	222.00	26	222.00
Mar. 5	220.80						

a Pumping.

95-22-3B1. Knut Olson. Drilled domestic and stock artesian well in limestone of Devonian age, diameter 4 inches, depth 134 feet. Land-surface datum is about 1,259 feet above msl. Highest water level 14.34 below lsd, July 3, 1945; lowest 20.50 below lsd, Dec. 28, 1949. Records available: 1941-51. Apr. 5, 17.51; June 28, 15.63; Oct. 4, 15.62.

95-21-27Q1. Dave Blankenship. Drilled unused artesian well in limestone of Devonian age, diameter 5 inches, depth 114 feet. Land-surface datum is 1,172 feet above msl. Highest water level 15.80 below lsd, Mar. 25, 1942; lowest 26.30 below lsd, Oct. 13, 1948. Records available: 1941-51. Apr. 5, 23.01; June 28, 17.18; Oct. 4, 18.74.

94-22-24J1. First National Bank. Thornton. Drilled unused water-table well in glacial drift, diameter 10 inches, depth 34 feet, lined with tile. Land-surface datum is about 1,191 feet above msl. Highest water level 9.50 below lsd, June 28, 1951; lowest 13.36 below lsd, Oct. 13, 1948. Records available: 1941-51. Apr. 5, 10.53; June 28, 9.50; Oct. 4, 10.80.

#### Clay County

96-35-3R1. Allis Wilson. Dug stock water-table well in glacial gravel, size 4 by 4 feet, depth 8 feet, cribbed with wood. Highest water level 2.53 below lsd, Oct. 11, 1946; lowest 6.75 below lsd, Oct. 2, 1940. Records available: 1940-51. June 27, 3.69; Oct. 3, 3.32.

#### Delaware County

89-5-29J1. City of Manchester well 2. Prospect and Union Ave. Drilled unused artesian well in dolomite of Silurian age, diameter 12 to 10 inches, depth 197 feet, cased 0-107. Land-surface datum is about 945 feet above msl. Water levels affected by pumping of nearby wells. Highest water level 13.5 below lsd, June 8, 1951; lowest 46.6 below lsd, Mar. 23, 1951. Records available: 1949-51.

#### Daily highest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.4	26.1	24.3	21.4	15.6	15.7	17.2	19.2	17.3	19.3	18.8	18.6
2	25.9	25.8	24.4	20.8	16.0	15.4	17.1	17.1	18.8	20.4	19.0	18.7
3	25.9	25.8	24.0	20.6	15.3	14.7	18.3	20.2	17.7	20.0	18.6	....
4	26.0	26.1	24.0	20.0	15.4	15.1	17.6	18.6	18.2	19.4	19.2	....
5	25.8	26.1	23.9	19.9	16.7	14.3	17.0	18.4	18.2	19.8	18.8	....
6	25.9	25.8	23.2	19.7	16.1	13.9	18.2	....	18.6	20.0	18.9	18.9
7	26.3	26.3	23.7	18.9	15.7	14.1	17.8	17.4	18.8	20.2	19.3	19.2
8	26.1	25.9	23.1	19.2	15.7	13.5	17.0	17.9	18.9	20.0	19.2	18.1
9	26.2	26.0	23.7	18.9	16.4	14.0	....	19.5	17.9	19.1	19.5	17.6
10	25.9	25.5	23.7	18.1	15.6	15.6	16.5	18.9	16.6	19.6	19.6	18.6
11	25.8	25.4	23.5	18.0	17.0	14.3	14.1	....	20.2	20.1	19.4	18.7
12	25.8	25.6	23.2	17.5	16.3	14.1	....	19.0	18.9	19.9	18.8	18.6
13	25.2	27.4	23.0	18.8	16.2	13.9	....	17.4	19.3	19.8	18.7	19.1
14	26.0	27.0	23.1	17.5	16.3	14.5	....	17.3	19.2	20.3	18.3	19.4
15	25.5	27.8	23.5	17.2	16.2	14.2	....	17.5	20.2	19.6	18.8	19.9
16	25.2	27.0	22.9	17.0	16.3	14.5	....	18.6	19.2	20.1	18.9	20.1
17	25.2	27.0	23.3	16.9	16.1	15.8	....	18.4	18.9	20.9	....	19.3
18	25.1	26.6	23.8	16.8	16.4	15.1	....	18.3	19.3	20.8	....	....
19	25.0	26.4	23.1	17.5	16.7	15.0	....	17.8	19.7	20.2	....	20.6
20	25.5	26.3	23.1	17.1	16.3	16.7	15.9	17.1	20.0	19.8	....	20.8
21	25.8	27.0	23.1	17.8	17.1	15.9	17.5	18.0	19.6	19.9	....	21.7
22	25.4	26.6	22.9	18.2	16.4	15.4	16.0	18.2	20.2	20.0	....	21.3
23	25.7	26.7	23.5	19.0	16.4	15.4	14.9	18.6	19.9	20.5	....	....
24	27.5	26.6	23.7	17.6	16.4	16.5	15.2	17.9	19.9	19.9	18.6	....
25	25.8	26.3	24.4	17.6	17.7	16.0	15.7	18.8	20.0	19.9	18.7	....

## 16 WATER LEVELS AND ARTESIAN PRESSURES, 1951, NORTH-CENTRAL STATES

89-5-29J1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	25.3	26.9	23.3	17.5	16.6	16.0	16.3	18.3	20.3	19.0	18.7	....
27	25.6	25.7	23.7	17.7	16.8	16.4	15.7	18.3	20.0	18.8	18.8	....
28	25.8	24.5	23.9	17.0	16.3	17.1	16.3	18.4	20.2	18.5	18.8	....
29	25.7		22.3	16.7	16.2	17.1	17.1	18.4	20.1	18.4	....	....
30	25.7		22.0	16.2	16.5	17.0	16.6	17.9	19.7	18.3	19.3	....
31	25.8		21.6		16.5		15.9	18.0		18.5		....

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	44.7	45.1	42.5	39.5	29.6	30.9	33.7	33.6	34.6	....	33.7	34.5
2	44.7	44.1	42.8	38.0	31.9	29.7	....	33.6	33.6	35.3	34.3	33.8
3	44.6	45.2	42.8	36.2	....	....	....	....	33.2	34.8	34.4	....
4	....	....	43.3	35.5	31.0	27.3	34.1	34.3	33.9	34.1	33.7	....
5	44.4	....	36.5	36.9	....	28.5	33.1	33.4	33.9	35.8	33.6	....
6	....	....	37.1	33.2	....	29.3	....	....	34.4	36.1	35.0	33.7
7	44.5	44.5	41.3	37.7	....	21.6	....	33.7	33.7	35.8	33.8	....
8	....	44.3	41.3	37.2	....	....	....	31.6	34.7	34.8	34.0	....
9	43.8	....	42.4	30.5	....	....	....	34.5	33.4	34.8	34.9	....
10	....	43.8	42.4	33.8	....	....	33.6	35.0	34.0	35.4	34.7	33.1
11	44.5	44.8	41.3	30.7	32.8	22.1	....	....	36.6	....	34.5	33.1
12	43.5	....	41.6	30.6	30.3	29.0	....	....	35.4	34.7	34.6	....
13	44.7	....	41.4	34.4	32.2	25.5	....	....	36.0	34.0	34.8	....
14	44.9	45.3	....	30.4	33.3	21.9	....	33.3	35.6	35.8	34.1	35.5
15	....	45.8	41.1	35.2	31.1	....	....	34.8	35.7	35.5	34.6	35.4
16	42.7	45.4	41.7	33.6	31.9	....	....	33.0	34.7	35.8	34.5	35.0
17	42.9	45.7	38.3	33.4	33.8	....	....	33.5	34.5	36.3	34.1	34.9
18	43.2	45.8	41.2	32.6	32.8	....	....	33.2	34.6	36.2	32.9	34.7
19	42.0	45.1	39.5	34.4	27.3	....	....	32.7	34.6	36.3	33.5	35.2
20	44.6	....	40.4	33.8	33.7	....	30.6	33.3	34.2	36.2	....	....
21	....	45.0	39.6	34.2	32.7	....	32.5	33.8	35.5	35.5	33.8	36.2
22	42.6	44.8	41.6	34.7	....	....	....	33.5	35.6	35.6	33.2	37.0
23	44.0	....	46.6	34.8	....	33.1	....	33.1	34.8	35.2	33.2	....
24	44.6	....	41.8	30.7	....	....	....	33.9	34.7	35.4	....	....
25	43.5	44.7	41.4	34.4	32.5	31.4	31.1	33.2	35.5	34.8	32.9	....
26	....	....	42.5	35.7	31.9	33.1	30.6	33.2	35.5	35.0	....	....
27	41.2	4.7	42.6	29.2	32.7	33.8	31.1	33.9	35.6	33.8	33.8	....
28	44.7		42.6	33.5	24.1	....	32.0	34.0	35.1	33.7	33.1	....
29	....		40.9	33.6	32.5	34.1	32.0	32.6	35.0	33.1	34.2	....
30	44.2		40.2	24.0	33.6	31.1	31.0	33.1	35.4	32.6	32.9	....
31	45.1		40.2		31.1		29.8	32.4		34.3		....

## Des Moines County

69-3-6A1. Iowa Ordnance Plant well 3. Drilled unused well, in St. Peter sandstone of Ordovician age, diameter 16 inches, depth 1,205 feet. Land-surface datum is 717 feet above msl. Highest water level 162.70 below lsd, Mar. 27, 1950; lowest 168.10 below lsd, Sept. 28, 1951. Records available: 1950-51.

## Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	165.54	165.85	165.77	165.55	165.65	165.94	166.59	167.22	167.59	167.60	167.56	166.96
2	165.35	165.87	165.61	165.70	165.84	166.06	166.66	167.15	167.87	167.39	167.55	166.85
3	165.29	165.62	165.34	165.73	165.67	166.19	166.47	167.20	167.78	167.28	166.82	166.63
4	165.74	165.68	165.71	165.78	165.65	166.33	166.60	167.38	167.75	167.31	167.44	166.81
5	165.65	165.77	165.60	165.81	165.73	166.38	166.87	167.30	167.59	167.70	167.66	166.57
6	166.01	165.44	165.49	165.53	165.97	166.24	166.79	167.04	167.58	167.89	167.34	166.30
7	165.90	166.09	165.74	165.41	166.03	166.00	166.62	167.07	167.80	167.76	178.37	166.85
8	165.80	165.93	166.06	165.40	165.90	166.03	166.48	166.99	167.71	167.85	167.35	167.17
9	165.55	166.12	166.19	165.54	165.81	166.12	166.55	167.15	167.51	167.75	167.31	167.25
10	165.61	165.76	166.07	165.58	165.59	166.21	166.64	167.27	167.40	167.77	167.34	167.01
11	165.81	165.45	165.93	165.41	165.76	166.10	166.72	167.35	167.50	167.64	167.30	166.82
12	165.74	165.49	165.80	165.17	165.82	166.05	166.83	167.49	167.40	167.75	166.73	166.81
13	165.76	166.05	....	165.31	165.93	166.18	166.86	167.43	167.69	167.82	166.39	167.14
14	165.48	166.28	165.50	165.38	165.99	166.27	166.90	167.45	167.75	167.67	166.77	166.85
15	165.50	166.00	165.67	165.63	165.99	166.19	166.90	167.37	167.86	167.63	167.08	....

## 69-3-6A1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	165.53	165.52	165.63	165.79	165.91	166.15	166.89	167.51	167.86	167.53	167.26	167.37
17	165.31	165.70	165.52	165.73	165.85	166.29	167.00	.....	167.75	167.66	167.51	166.96
18	165.31	165.53	165.59	165.43	165.87	166.34	166.95	167.54	167.67	167.69	167.40	167.02
19	165.29	165.63	165.77	165.84	165.85	166.26	166.98	167.52	167.64	167.80	167.45	166.76
20	165.47	165.53	165.80	165.97	165.79	166.32	166.92	167.31	167.52	167.41	167.26	166.41
21	166.13	165.83	165.86	165.64	165.85	166.18	166.76	167.48	167.70	167.24	166.95	166.69
22	165.59	165.89	165.50	166.02	165.85	166.22	166.95	167.62	167.67	167.47	166.97	166.85
23	165.55	166.02	165.35	166.05	165.94	166.34	167.06	167.70	167.75	167.47	167.16	167.03
24	165.78	165.85	165.95	165.77	165.77	166.36	167.02	167.66	167.68	167.59	167.38	167.19
25	165.89	165.54	165.91	165.71	165.63	166.46	167.01	167.45	167.76	167.57	166.92	166.88
26	165.56	165.49	165.85	165.98	165.49	166.22	167.00	167.37	167.32	167.53	167.29	167.35
27	165.75	165.77	165.50	165.74	165.60	166.21	166.91	167.35	167.82	167.53	167.22	167.41
28	165.96	165.37	165.35	165.60	165.75	166.47	167.05	167.35	168.10	167.37	167.12	166.69
29	166.22	165.22	165.30	165.52	165.83	166.50	167.12	167.35	167.95	167.29	167.08	166.50
30	166.17	165.40	165.57	165.98	166.44	167.11	167.30	167.73	167.19	167.08	166.61	166.11
31	165.87	165.52	165.93	165.93	167.08	.....	.....	.....	167.53	166.32	166.32	166.32

69-3-6R1. Iowa Ordnance Plant well 2. Drilled unused artesian well, diameter 19 inches, depth 675 feet. Land-surface datum is 699 feet above msl. Well originally drilled to 759 feet. Probably taps water in limestone of Devonian age from 660 to 735 feet and limestone of Mississippian age from 7 to 240 feet. Highest water level 80.11 below lsd, Dec. 20, 1951; lowest 83.19 below lsd, Apr. 6, 1950. Records available: 1950-51.

## Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	82.08	82.31	82.03	81.86	81.82	81.71	81.56	81.54	81.37	81.22	81.09	80.61
2	82.00	82.35	82.12	82.00	81.95	81.71	81.62	81.51	81.44	81.05	81.15	80.54
3	81.88	82.22	81.82	82.04	81.87	81.76	81.51	81.48	81.53	80.92	80.69	80.34
4	82.09	82.07	82.12	82.04	81.75	81.87	81.46	81.65	81.57	80.93	80.91	80.39
5	82.22	82.22	82.07	82.07	81.79	81.93	81.63	81.48	81.16	81.11	80.31	80.31
6	82.38	81.95	82.00	81.92	81.89	81.85	81.69	81.43	81.41	81.28	81.04	80.12
7	82.42	82.29	82.15	81.69	82.03	81.67	81.57	81.42	81.54	81.28	80.91	80.28
8	82.33	82.37	82.26	81.67	81.96	81.55	81.41	81.33	81.54	81.39	80.92	80.65
9	82.11	82.45	82.50	81.77	81.85	81.62	81.31	81.43	81.37	81.31	80.84	80.73
10	82.08	82.30	82.44	81.81	81.70	81.72	81.49	81.53	81.20	81.33	80.88	80.70
11	82.23	82.01	82.33	81.79	81.78	81.66	81.55	81.57	81.23	81.28	80.90	80.45
12	82.24	81.92	92.32	81.50	81.83	81.61	81.62	81.66	81.17	81.26	80.49	80.39
13	82.24	82.25	82.31	81.60	81.93	81.64	81.65	81.61	81.31	81.31	80.19	80.59
14	82.09	82.58	.....	81.68	81.99	81.73	81.68	81.61	81.36	81.22	80.29	80.48
15	81.94	82.47	.....	81.81	82.03	81.67	81.63	81.49	81.45	81.19	80.56	.....
16	82.12	82.08	82.03	81.97	81.96	81.56	81.59	81.53	81.50	81.11	80.76	80.88
17	81.89	82.11	81.98	82.02	81.89	81.58	81.60	81.51	81.43	81.20	81.01	80.69
18	81.88	82.02	81.92	81.79	81.85	81.61	81.57	81.55	81.37	81.26	81.04	80.46
19	81.88	82.01	82.11	81.97	81.80	81.55	81.56	81.56	81.33	81.37	81.03	80.47
20	81.89	82.02	82.15	82.11	81.71	81.51	81.52	81.48	81.24	81.12	80.96	80.11
21	82.43	82.14	82.18	81.96	81.74	81.52	81.41	81.49	81.26	80.88	80.72	80.14
22	82.29	81.29	81.97	82.03	81.75	81.47	81.46	81.59	81.30	80.93	81.66	80.34
23	82.04	82.35	81.71	82.63	81.83	81.52	81.57	81.68	81.37	81.07	80.76	80.40
24	82.17	82.27	82.08	83.03	81.74	81.53	81.58	81.66	81.34	81.10	80.90	80.67
25	82.30	82.03	82.12	82.84	81.63	81.65	81.57	82.57	81.37	81.13	80.75	80.43
26	82.20	81.62	82.18	82.09	81.50	81.46	81.57	81.45	81.10	81.08	80.77	80.67
27	.....	82.05	81.93	82.02	81.52	81.43	81.49	81.37	81.27	81.10	80.86	80.86
28	82.30	81.97	81.76	81.87	81.63	81.51	81.49	81.36	81.52	80.93	80.71	80.38
29	82.56	81.69	81.77	81.69	81.55	81.55	81.32	81.52	80.89	80.73	81.09	.....
30	82.61	81.68	81.76	81.78	81.50	81.55	81.30	81.32	80.79	80.71	81.08	.....
31	82.40	81.86	81.76	81.76	81.47	81.28	81.02	80.91	80.91	80.91	80.91	.....

Dickinson County

99-36-6G1. Charles Miller. Drilled unused water-table well in glacial drift, diameter 16 inches, depth 34 feet, lined with tile. Highest water level 0.56 above lsd, June 30, 1945; lowest 6.50 below lsd, Dec. 20, 1940. Records available: 1940-51. Apr. 3, -0.53; June 26, +0.01; Oct. 2, -0.64.

Dubuque County

89-3E-7Q1. City of Dubuque well 2. Drilled unused artesian well in sandstone of Cambrian age, diameter 8 inches, depth 1,306 feet, cased to 1,000. Land-surface datum is about 611 feet above msl. Highest water level 17.17 below lsd, Apr. 21, 1947; lowest 120.5 below lsd, Jan. 24, 1951. Records available: 1947-51.

Daily highest water level from recorder graph

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	67.0	Mar. 8	61.3	Apr. 2	72.0	Nov. 18	67.7
24	69.2	9	62.3	3	69.0	19	61.3
25	69.7	10	61.3	4	70.0	20	63.0
27	76.8	12	59.4	7	80.8	22	60.6
28	76.3	29	70.0	8	69.5	23	60.9
29	95.0	30	69.4	9	74.0	24	69.3
Feb. 19	82.4	Apr. 1	69.3	Nov. 17	67.8	25	62.4

Daily lowest water level from recorder graph

Jan. 18	106.1	Mar. 11	102.7	Mar. 30	112.8	Apr. 10	110.0
21	104.3	12	98.8	31	105.9	12	105.9
22	114.0	20	108.6	Apr. 1	103.2	Nov. 17	93.5
24	120.5	21	108.3	2	111.6	18	97.4
25	105.2	22	110.0	3	112.8	19	91.5
26	107.3	24	111.1	4	108.5	20	93.5
27	108.2	25	103.0	5	110.4	21	94.3
28	106.2	26	115.5	6	108.9	22	87.7
29	109.3	27	112.2	7	106.9	23	92.2
Feb. 18	103.7	28	111.1	8	103.0	24	88.8
19	109.8	29	110.0	9	112.1	25	91.5

Emmet County

100-32-11R1. Okamanpedan State Park. Drilled artesian well in Dakota sandstone, diameter 6 inches, depth 277 feet. Land-surface datum is about 1,233 feet above msl. Highest water level 59.60 below lsd, Dec. 19, 1946; lowest 64.80 below lsd, Mar. 28, 1945. Records available: 1939-51. Apr. 4, 64.04; June 27, 63.84; Oct. 3, 63.71.

Henry County

71-6-9B1. City of Mount Pleasant well 2. Drilled municipal artesian well in Jordan sandstone, diameter 10 to 6 inches, depth 1,820 feet, cased to 678. Land-surface datum is about 732 feet above msl. Water levels affected by pumping of nearby well. Highest water level 132.40 below lsd, Sept. 5, 1945; lowest 187.20 below lsd, Oct. 23, 1946. Records available: 1945-51. Mar. 30, 148.70; June 19, 149.58; Sept. 14, 149.86.

71-6-9B2. City of Mount Pleasant well 4. Drilled municipal artesian well in limestone of St. Lawrence formation, diameter 20 to 19 inches, depth 1,860 feet, cased to 623. Land-surface datum is about 732 feet above msl. Highest water level 132.00 below lsd, May 5, 1946; lowest 167.50 below lsd, Apr. 30, 1946. Records available: 1946-50. No static water level measurement made in 1951.

71-6-9M1. City of Mount Pleasant well 3. At City Park. Drilled municipal artesian well in Jordan sandstone, diameter 16 to 8 inches, depth 1,802 feet, cased to 1,689. Land-surface datum is about 671 feet above msl. Highest water level 71.60 below lsd, Dec. 31, 1945; lowest 188.35 below lsd, Sept. 5, 1945. Records available: 1945-50. No static water level measurement made in 1951.

Ida County

89-40-35D1. City of Holstein well 3. Drilled municipal artesian well in Dakota sandstone, diameter 16 to 10 inches, reported depth 645 feet, cased to 549, screen 545-645. Land-surface datum is about 1,454 feet above msl. Highest water level 317.90 below lsd, Oct. 24, 1945; lowest 332.85 below lsd, Mar. 25, 1948. Records available: 1939, 1945, 1948-50. No measurement made in 1951.

Jasper County

80-18-31C1. P. W. Beukema. Dug unused water-table well in glacial drift, diameter 36 inches, depth 37 feet, cribbed with brick. Highest water level 2.67 below lsd, June 10, 1947; lowest 27.15 below lsd, Dec. 18, 1948. Records available: 1940-51. Mar. 27, 24.14; June 22, 12.50; Sept. 12, 15.41.

80-17-17K2. State Conservation Commission test hole 19. Drilled observation artesian well in Red Rock channel sandstone of Pennsylvanian age, diameter 7 inches, depth 122 feet, cased to 27. Land-surface datum is about 903 feet above msl. Highest water level 55.40 below lsd, Dec. 6, 1951; lowest 59.38 below lsd, Aug. 11, 1950. Records available: 1950-51.

## Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	58.81	.....	58.54	58.07	57.35	56.81	56.36	55.94	55.99	h55.91	56.13	55.76
2	.....	.....	58.32	58.06	57.42	56.80	56.34	55.78	56.00	55.84	56.04	55.68
3	.....	.....	58.35	58.00	57.28	56.84	56.19	55.97	56.08	55.92	55.64	55.71
4	.....	.....	58.40	58.01	57.32	56.86	56.37	55.98	56.02	56.00	56.08	55.82
5	.....	.....	58.74	58.25	57.96	57.27	56.78	56.39	55.87	55.92	56.30	56.22
6	.....	.....	58.76	58.36	57.79	57.46	56.67	56.26	55.82	55.98	56.22	55.98
7	.....	.....	58.99	58.38	57.80	57.32	56.54	56.16	55.82	56.10	56.26	56.04
8	.....	.....	58.79	.....	57.83	57.24	56.66	56.19	55.86	55.94	56.25	55.85
9	.....	.....	58.86	58.40	57.86	57.22	56.68	55.80	55.94	55.83	56.17	55.98
10	.....	.....	58.62	58.28	57.87	57.20	56.64	55.84	55.95	.....	56.14	56.02
11	.....	.....	58.54	58.33	57.70	57.21	56.56	55.86	56.00	.....	56.08	55.90
12	.....	.....	58.69	58.24	57.66	57.22	56.53	55.84	56.00	55.80	56.18	55.63
13	.....	.....	58.99	.....	57.72	57.22	.....	55.87	55.96	56.02	56.15	55.54
14	.....	.....	58.90	.....	57.68	57.23	h56.56	.....	55.87	56.08	56.12	55.86
15	.....	.....	58.67	.....	57.84	57.18	56.46	.....	h55.89	56.13	56.10	56.04
16	.....	.....	.....	.....	57.81	57.12	56.44	.....	55.93	56.09	56.14	56.10
17	.....	.....	.....	.....	57.58	57.07	56.52	h55.99	55.90	56.02	56.26	56.15
18	.....	.....	.....	.....	h57.65	57.06	56.47	56.00	55.97	55.98	56.26	55.96
19	h58.70	.....	.....	.....	57.76	56.94	56.37	55.98	55.92	55.96	56.22	55.98
20	58.93	58.45	.....	.....	57.65	57.01	56.50	55.88	55.80	55.90	55.87	h55.75
21	59.12	58.58	.....	.....	57.47	57.04	56.37	55.88	55.99	56.11	.....	55.69
22	58.60	58.57	.....	.....	57.74	57.03	56.40	56.04	56.04	56.04	.....	55.82
23	58.84	58.54	.....	.....	57.58	57.01	56.46	56.02	56.01	56.10	.....	55.88
24	58.95	58.42	.....	.....	57.46	58.90	56.54	55.95	55.96	56.08	h56.05	55.99
25	58.94	58.29	.....	.....	57.55	56.89	56.40	55.94	55.80	56.08	56.02	55.62
26	58.66	58.42	.....	.....	57.58	56.86	56.37	55.89	55.87	55.76	56.12	56.99
27	58.95	58.51	h57.98	.....	57.35	66.91	56.28	55.87	55.81	56.21	56.00	55.79
28	59.00	58.13	58.02	57.38	56.91	56.49	55.97	55.86	.....	55.98	55.88	55.56
29	59.04	.....	58.00	57.32	56.91	56.36	55.92	55.86	.....	55.82	55.79	55.60
30	.....	.....	58.05	57.36	56.90	56.31	55.88	55.82	.....	55.85	h55.76	55.70
31	.....	.....	58.02	.....	56.81	.....	55.92	55.95	.....	56.09	.....	55.56

## h Tape measurement.

80-17-17L4. State Conservation Commission test hole 4. Drilled observation artesian well in Red Rock channel sandstone of Pennsylvanian age, diameter 7 inches, depth 85 feet, cased to 32. Land-surface datum is about 852 feet above msl. Highest water level 2.50 below lsd, July 9, 1951; lowest 9.40 below lsd, Oct. 20, 1950. Records available: 1950-51.

## Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.19	.....	6.52	5.39	4.72	4.02	3.73	3.69	4.40	h4.62	3.44	4.08
2	.....	.....	6.35	5.39	4.62	4.04	3.74	3.74	4.42	4.56	4.40	4.04
3	.....	.....	6.32	5.37	4.57	3.88	3.82	3.84	4.48	4.61	4.00	3.94
4	.....	.....	6.40	5.29	4.61	3.94	3.58	3.93	4.46	4.67	4.46	4.10
5	.....	h6.93	6.30	5.19	4.64	3.85	3.71	3.89	4.38	4.93	4.60	4.00
6	.....	6.92	6.33	5.03	4.81	3.75	3.62	3.87	4.38	4.89	4.44	3.82
7	.....	7.11	6.38	4.77	h4.76	3.66	3.52	3.94	4.51	4.86	4.47	4.26
8	.....	6.95	6.46	4.82	4.72	3.62	3.56	4.00	4.40	4.89	4.37	4.42
9	.....	7.00	6.46	4.87	4.72	3.72	2.50	4.12	4.30	4.80	4.44	4.42
10	.....	6.83	6.05	4.89	4.48	3.79	2.53	4.20	.....	4.80	4.50	4.17
11	.....	6.77	6.36	4.80	4.43	3.74	3.11	4.14	.....	4.72	4.44	4.18
12	.....	6.65	6.46	4.66	4.46	....	2.85	4.10	4.32	4.81	3.94	4.19
13	.....	6.97	.....	4.63	4.52	....	....	4.26	4.52	4.81	3.59	4.39
14	.....	6.91	.....	4.69	4.56	3.74	....	....	4.57	4.74	3.59	4.26
15	.....	6.72	.....	4.88	4.60	3.61	....	....	4.63	4.75	3.69	4.48

## 80-17-17L4--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	....	....	....	4.95	4.56	3.46	....	....	4.62	4.72	3.90	4.45
17	....	....	....	....	4.53	3.61	h3.19	....	4.58	4.78	4.06	....
18	....	....	....	h4.90	4.44	3.60	3.16	....	4.60	4.69	3.96	....
19	h7.01	....	....	5.08	4.42	3.54	3.19	....	4.58	4.56	....	....
20	7.13	6.41	....	5.06	4.36	3.62	3.18	....	4.53	4.24	h3.88	....
21	7.30	6.55	....	4.86	4.42	3.60	3.18	....	4.72	....	3.82	....
22	6.96	6.54	....	5.11	4.41	3.56	3.38	....	4.67	....	3.98	....
23	7.07	6.57	....	5.04	4.46	3.64	3.42	....	4.70	....	4.08	....
24	7.14	6.44	....	4.92	4.37	3.69	3.42	h4.33	4.72	h4.20	4.20	....
25	7.13	6.26	....	4.76	4.33	3.71	3.40	3.93	4.74	4.16	3.91	....
26	6.95	6.34	....	4.80	3.83	3.64	3.39	4.13	4.39	4.20	4.23	....
27	7.12	6.48	h5.50	4.66	3.95	3.62	3.38	4.12	....	4.18	4.12	h4.44
28	7.16	6.21	5.14	4.64	4.01	3.78	3.47	4.18	....	4.16	4.14	4.06
29	7.18	....	5.18	4.65	4.01	3.69	3.57	4.23	....	4.10	....	4.06
30	....	....	5.29	4.68	4.06	3.62	3.59	4.24	....	4.13	h4.10	4.19
31	....	....	....	....	3.96	....	3.59	4.33	....	4.40	....	4.02

h Tape measurement.

80-17-17M2. State Conservation Commission test hole 31. Drilled observation artesian well in Red Rock channel sandstone of Pennsylvanian age, diameter 7 inches, depth 189 feet, cased to 108. Land-surface datum is about 954 feet above msl. Recording gage installed Aug. 3, 1951. Highest water level 106.41 below lsd, Dec. 6, 1951; lowest 109.01 below lsd, Nov. 3, 1950. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 19	108.50	Aug. 14	107.42	Sept. 18	107.22	Oct. 29	106.96
Feb. 5	108.58	44	h107.27	19	107.16	Nov. 2	h107.38
20	108.74	15	107.32	20	107.02	9	h107.16
Mar. 2	108.75	16	107.42	21	107.32	20	h107.12
27	108.36	17	107.36	22	107.28	30	h107.08
Apr. 6	108.39	18	107.41	23	107.39	Dec. 1	107.02
18	108.47	19	107.31	24	107.33	2	106.88
26	108.67	20	107.28	25	107.00	3	106.74
May 7	108.52	21	107.46	26	107.33	4	107.02
16	108.33	22	107.52	Oct. 1	107.11	5	106.80
24	108.04	23	107.40		2	106.92	6	106.41
June 1	108.09	24	h107.37	3	107.01	7	107.20
14	108.09	25	107.16	4	107.20	8	107.56
22	107.70	26	107.18	5	107.60	9	107.43
July 17	107.62	27	107.08	6	107.58	10	107.89
Aug. 3	h107.53	28	107.16	7	107.63	11	107.95
4	107.68	29	107.20	8	107.46	12	108.03
5	107.34	30	107.10	9	107.47	13	107.66
6	107.30	31	107.30	10	h107.31	14	h107.52
7	107.16	Sept. 1	107.40	24	h107.30	27	107.50
8	107.33	12	106.97	25	107.26	28	106.63
9	107.45	13	107.34	26	107.34	29	106.56
10	107.51	14	107.42	27	107.24	30	106.75
11	107.60	15	107.47	28	107.14	31	106.50
12	107.40	17	h107.28				

h Tape measurement.

80-17-20E1. State Conservation Commission test hole A-17. Drilled observation artesian well in Red Rock channel sandstone of Pennsylvanian age, diameter 5 inches, depth 110 feet, cased to 104. Land-surface datum is about 887 feet above msl. Highest water level 49.40 below lsd, Dec. 7, 1951; lowest 50.84 below lsd, Dec. 14, 1950. Records available: 1948-51. Apr. 18, 50.08; Dec. 7, 49.40.

80-17-28D1. State Conservation Commission test hole A-2. Drilled observation artesian well in Red Rock channel sandstone of Pennsylvanian age, diameter 5 inches, depth 55 feet, cased to 50. Land-surface datum is about 836 feet above msl. Highest water level 1.55 below lsd, June 25, 1948; lowest 6.89 below lsd, Aug. 24, 1948. Records available: 1948-51. Jan. 19, 5.37; Apr. 18, 2.26; June 14, 2.16; Nov. 2, 3.03.

80-17-28D2. State Conservation Commission test hole A-11. Driven observation water-table well in alluvial sand, diameter 1½ inches, depth 14 feet, screen 12-14. Land-surface datum is about 836 feet above msl. Highest water level 2.10 below lsd, June 14, 1951; lowest 5.88 below lsd, Dec. 14, 1950. Records available: 1948-51. Jan. 19, 5.57; Apr. 18, 2.20; June 14, 2.10; Nov. 2, 4.12.

Jefferson County

72-10-25A1. City of Fairfield well 1. Drilled unused artesian well in glacial sand and gravel, diameter 6 inches, depth 160 feet. Land-surface datum is about 723 feet above msl. Highest water level 14.08 below lsd, Aug. 27, 1951; lowest 44.16 below lsd, Feb. 20, 1949. Records available: 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	14.92	Apr. 9	15.04	July 9	14.20	Oct. 8	14.22
8	14.99	16	15.03	16	14.18	15	14.22
15	14.86	23	14.81	23	14.14	22	14.22
22	14.86	30	14.54	30	14.20	29	14.21
29	14.99	May 7	14.54	Aug. 6	14.22	Nov. 5	14.21
Feb. 5	14.93	14	14.41	13	14.24	12	14.21
12	14.92	21	14.35	20	14.20	19	14.14
19	14.94	28	14.33	27	14.08	26	14.10
26	15.01	June 4	14.34	Sept. 3	14.19	Dec. 3	14.10
Mar. 5	15.09	11	14.25	10	14.13	10	14.15
12	15.12	18	14.25	17	14.19	17	14.12
19	15.02	25	14.19	24	14.20	24	14.12
26	15.12	July 2	14.21	Oct. 1	14.20	31	14.13
Apr. 2	15.07						

72-10-26A1. Parsons College. Formerly Dr. Charles Carter. Fairfield. Dug unused water-table well in glacial drift, diameter 36 inches, depth 70 feet, cribbed with brick. Highest water level 14.94 below lsd, Apr. 23, 1944; lowest 42.80 below lsd, Sept. 9, 1945. Records available: 1942-51. Jan. 18, 28.20; Mar. 30, 27.92; June 20, 26.84; Sept. 14, 27.60.

Johnson County

80-5-9K3. U. S. Geol. Survey. Frank Miller. Morse. Driven observation water-table well in glacial sand, diameter  $1\frac{1}{4}$  inches, depth 15 feet, screen 13-15. Replaces well 80-5-K2. Highest water level 1.97 below lsd, Apr. 7, 1951; lowest 8.41 below lsd, Nov. 4, 1950. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 3, 1950	4.12	Dec. 2, 1950	7.94	Apr. 14, 1951	2.48	Aug. 18, 1951	6.63
9	5.78	9	8.15	21	4.01	25	6.44
12	5.93	16	8.03	28	4.08	Sept. 2	6.08
18	6.27	23	8.14	May 5	4.94	10	6.89
25	6.99	30	8.07	14	3.48	22	7.28
Sept. 2	7.02	Jan. 6, 1951	8.38	19	4.58	Oct. 2	7.22
8	7.32	13	8.21	26	1.98	14	6.08
16	7.58	21	7.33	June 2	4.34	22	5.12
18	7.52	27	7.52	9	4.22	29	5.18
23	7.79	Feb. 3	7.80	16	4.39	Nov. 3	5.38
30	6.72	10	7.89	23	4.23	10	6.09
Oct. 6	7.94	17	6.43	30	4.79	17	6.16
14	8.18	24	6.13	July 7	5.09	25	4.96
21	8.14	Mar. 3	5.88	15	4.06	Dec. 1	5.18
28	8.35	11	7.67	21	5.43	8	5.58
Nov. 4	8.41	24	5.46	28	5.71	18	6.08
12	8.18	Apr. 1	3.68	Aug. 3	6.31	23	6.22
20	7.98	7	1.97	12	6.61	30	6.24
25	8.12						

80-5-22M1. Chicago, Rock Island & Pacific Railway. Dug unused water-table well in glacial drift, diameter 4 feet, depth 19 feet, cribbed with brick. Lowest water level 18.63 below lsd, Dec. 28-30, 1949. Records available: 1941-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	h18.76	May 15	7.34	May 27	8.58	Dec. 6	11.07
May 3	9.71	16	7.60	28	7.74	7	11.19
4	9.91	17	7.96	29	7.42	8	11.48
5	10.17	18	8.35	30	7.50	9	11.54
6	10.44	19	8.72	June 1	7.92	10	11.51
7	10.73	20	9.07	2	8.31	11	11.39
8	10.86	21	9.45	3	8.66	12	11.40
9	10.98	22	9.79	4	9.01	13	11.57
10	11.07	23	10.10	5	9.28	14	11.58
11	9.84	24	10.26	6	9.49	15	11.71
12	8.17	25	10.41	7	9.65	29	12.88
13	7.42	26	10.08	Dec. 5	11.10	30	12.94
14	7.20						

h Tape measurement.

## 22 WATER LEVELS AND ARTESIAN PRESSURES, 1951, NORTH-CENTRAL STATES

80-5-22M2. Chicago, Rock Island & Pacific Railway. Drilled unused artesian well, diameter 5 inches, depth 82 feet. Highest water level 13.77 below lsd, Apr. 15, 1944; lowest 20.21 below lsd, Aug. 31, 1948. Records available: 1941-51. Jan. 11, 18.67; May 17, 15.15; Dec. 5, 15.70.

Lee County

67-5-14L1. U. S. Geol. Survey. Driven observation water-table well in alluvial sand, diameter  $1\frac{1}{2}$  inches, depth 13 feet, screen 11-13. Land-surface datum is about 529 feet above msl. Highest water level 6.89 below lsd, June 2, 1950; lowest 8.15 below lsd, Feb. 27, 1951. Records available: 1950-51. Feb. 27, 8.15; Mar. 30, 7.27; June 19, 7.14; Sept. 14, 7.80.

Linn County

85-6-19J1. U. S. Geol. Survey. John Inobit. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 9 feet, perforations 3-9. Highest water level 3.02 below lsd, Apr. 25, 1945; lowest 6.94 below lsd, Aug. 29, 1941. Records available: 1940-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	5.87	Apr. 26	4.33	July 30	5.27	Oct. 30	4.64
Feb. 26	4.11	May 31	4.79	Aug. 28	4.92	Nov. 29	3.98
Mar. 29	4.31	June 28	5.00	Sept. 26	5.33		

85-6-26D2. U. S. Geol. Survey. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 14 feet, perforations 9-14. Highest water level 0.21 below lsd, Apr. 26, 1951; lowest 8.11 below lsd, Dec. 2, 1947. Records available: 1940-51.

Jan. 30	6.37	Apr. 26	0.21	July 30	3.00	Oct. 30	1.97
Feb. 26	1.91	May 31	.26	Aug. 28	3.90	Nov. 29	2.34
Mar. 29	.28	June 28	2.02	Sept. 26	4.54	Dec. 27	3.19

85-6-29B1. Earl Balderson. Drilled unused artesian well in glacial sand, diameter 5 inches, depth 147 feet. Highest water level 56.67 below lsd, June 27, 1947; lowest 64.95 below lsd, Nov. 13, 1940. Records available: 1940-51.

Jan. 30	64.73	Apr. 26	60.95	July 30	59.12	Oct. 30	60.75
Feb. 26	64.45	May 31	59.20	Aug. 28	59.64	Nov. 29	59.94
Mar. 29	62.68	June 28	58.99	Sept. 26	60.23		

84-7-11R1. Clifford Burns. Drilled unused water-table well in glacial drift, diameter 12 inches, depth 29 feet, lined with tile. Highest water level 2.82 below lsd, Apr. 26, 1951; lowest 10.06 below lsd, Dec. 28, 1949. Records available: 1948-51.

Jan. 30	7.19	Apr. 26	2.82	July 30	4.44	Oct. 30	4.10
Feb. 26	5.44	May 31	3.50	Aug. 28	5.38	Nov. 29	4.12
Mar. 29	3.87	June 28	3.88	Sept. 26	5.87	Dec. 27	4.52

84-7-13E2. U. S. Geol. Survey. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 17 feet, perforations 12-17. Highest water level 1.56 below lsd, Mar. 29, 1951; lowest 12.03 below lsd, Sept. 30, 1948. Records available: 1940-51.

Jan. 30	6.09	Apr. 26	2.02	July 30	3.47	Oct. 30	2.60
Feb. 26	2.52	May 31	2.15	Aug. 28	4.03	Nov. 29	2.47
Mar. 29	1.56	June 28	2.66	Sept. 26	4.62	Dec. 27	3.15

84-6-20N1. U. S. Geol. Survey. W. Wiggins. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 12 feet, perforations 6-11. Highest water level 1.68 below lsd, Mar. 29, 1951; lowest 10.50 below lsd, Oct. 17, 1940. Records available: 1940-51.

Jan. 30	7.87	Apr. 26	2.22	July 30	3.91	Oct. 30	3.64
Feb. 26	2.59	May 31	2.90	Aug. 28	5.65	Nov. 29	3.73
Mar. 29	1.68	June 28	3.44	Sept. 26	5.88	Dec. 27	4.49

84-6-22F1. Joseph Sinaika. Formerly C. A. Wissler. Dug unused water-table well in glacial drift, diameter 30 inches, depth 11 feet, cribbed with rock. Highest water level 2.61 below lsd, Apr. 26, 1951; lowest 11.00 below lsd, Oct. 14, 1940. Records available: 1940-51.

Jan. 30	9.45	May 31	2.91	Aug. 28	5.43	Nov. 29	3.95
Feb. 26	8.19	June 28	3.57	Sept. 26	6.12	Dec. 27	4.87
Mar. 29	2.61	July 30	4.20	Oct. 30	3.56		

83-7-2P1. Mr. Hellenbeck. Drilled unused water-table well in limestone, diameter 6 inches, depth 52 feet. Highest water level 23.66 below lsd, Apr. 28, 1947; lowest 33.10 below lsd, Aug. 30, 1945. Records available: 1940-51. Feb. 26, 31.28; Mar. 29, 27.93; Apr. 26, 26.23; May 31, 26.15; Aug. 28, 31.44; Sept. 26, 30.95; Oct. 30, 24.92.

83-7-1B1. City of Marion. Drilled public-supply artesian well in dolomite of Silurian age, diameter 12 inches, depth 437 feet, cased to 128. Land-surface datum is 787.52 feet above msl. Highest water level 3.48 below lsd, Apr. 28, 1947; lowest 11.81 below lsd, Jan. 31, 1950. Records available: 1941-50. No measurement made in 1951.

83-7-16D1. City of Cedar Rapids. Shaver Park. Drilled city park artesian well in limestone, diameter 5 inches, depth 127 feet. Highest water level 81.80 below lsd, June 27, 1947; lowest 93.66 below lsd, Dec. 31, 1948. Records available: 1940-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	89.24	June 28	84.21	Aug. 28	86.49	Oct. 30	88.18
Apr. 26	83.94	July 30	85.39	Sept. 26	87.06	Nov. 29	88.54
May 31	83.64						

83-7-16J1. City of Cedar Rapids. Daniels Park. Drilled artesian well in limestone, diameter 5 inches, depth 163 feet. Highest water level 29.24 below lsd, May 31, 1944; lowest 40.85 below lsd, Dec. 31, 1948. Records available: 1940-44, 1948-51.

Jan. 30	34.88	Apr. 26	33.54	July 30	33.33	Oct. 30	34.23
Feb. 26	34.18	May 31	33.47	Aug. 28	33.82	Nov. 29	34.05
Mar. 29	33.81	June 28	33.45	Sept. 26	33.72	Dec. 27	34.35

83-7-17L1. City of Cedar Rapids. Ellis Park. Drilled unused artesian well in limestone, diameter 5 inches, depth 98 feet. Highest water level 15.00 below lsd, June 30, 1946; lowest 21.86 below lsd, Dec. 28, 1949. Records available: 1940-51.

Feb. 26	19.33	May 31	19.67	Aug. 28	19.79	Oct. 30	19.76
Mar. 29	18.57	June 28	19.79	Sept. 26	20.36	Nov. 29	20.19
Apr. 26	18.46	July 30	20.39				

83-7-21K1. Wapsi Valley Creamery, Cedar Rapids. Drilled unused artesian well in dolomite of Silurian age, diameter 8 to 7 inches, depth 156 feet, cased to 105. Water levels affected by nearby pumping wells. Highest water level 56.76 below lsd, Apr. 23, 1944; lowest 67.44 below lsd, Sept. 21, 1951. Records available: 1943-51.

Daily noon water level from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	61.89	62.47	62.44	60.67	61.85	62.02	61.37	61.91	62.56	60.65	.....	64.31
2	62.40	62.52	62.27	61.35	61.79	62.01	61.27	62.03	62.24	60.77	.....	64.19
3	62.56	62.51	62.11	61.49	61.71	61.70	61.35	62.09	61.66	60.98	.....	64.25
4	62.83	62.39	62.09	61.61	61.66	61.52	60.82	61.98	61.81	61.14	.....	64.33
5	62.96	62.37	61.99	61.57	61.46	61.52	60.99	61.78	61.79	61.18	.....	64.38
6	62.83	62.77	62.18	61.63	61.17	61.43	61.17	61.65	62.00	60.87	.....	64.30
7	62.55	62.97	62.20	61.47	61.19	61.43	60.97	61.97	61.99	60.68	.....	64.53
8	62.72	62.85	62.25	61.35	61.27	61.43	60.98	62.04	61.87	60.62	.....	64.51
9	62.99	62.87	62.31	61.22	61.51	61.46	60.67	62.08	61.43	62.27	.....	64.46
10	63.08	62.59	62.20	60.89	61.47	61.46	60.83	62.07	61.65	62.27	64.08	64.45
11	62.88	62.40	62.14	60.43	61.37	61.46	60.91	62.17	61.93	60.65	63.99	64.55
12	62.83	62.64	62.05	60.29	61.39	61.64	60.85	61.95	62.06	60.66	63.89	64.51
13	62.82	63.02	62.02	60.59	61.49	61.76	60.95	61.95	62.08	60.68	63.86	64.65
14	62.65	63.02	62.00	60.66	61.64	61.68	61.03	62.07	62.00	60.59	64.05	64.64
15	62.72	62.85	62.28	60.75	61.82	61.71	61.13	62.00	62.00	60.93	64.09	64.72
16	62.76	62.85	62.25	60.89	62.01	61.64	61.19	61.99	61.89	61.17	64.15	64.58
17	62.76	62.67	62.17	61.41	62.11	61.59	61.46	62.01	61.78	61.07	64.11	64.52
18	62.76	62.40	62.01	60.99	62.15	61.71	61.24	61.95	61.69	61.02	63.93	64.73
19	62.78	62.36	62.03	61.47	62.19	61.82	61.64	61.73	61.64	60.99	64.22	64.79
20	62.73	62.52	62.11	61.41	61.97	61.87	61.67	61.75	61.44	60.95	64.03	64.79
21	62.45	62.59	62.15	61.35	62.05	61.77	61.71	61.67	67.44	60.81	64.09	64.83
22	62.40	62.53	62.05	61.20	62.03	61.54	61.48	61.77	60.96	60.77	63.69	64.86
23	62.60	62.63	62.13	61.30	61.95	61.52	61.44	61.98	60.84	62.27	63.75	64.86
24	.....	62.45	62.05	61.51	.....	61.43	61.66	62.01	60.80	62.25	64.03	64.68
25	.....	61.54	61.92	61.58	.....	61.39	61.75	62.06	60.86	60.72	63.45	64.09
26	.....	62.23	61.90	61.47	61.95	61.51	61.83	62.04	60.71	61.31	63.99	.....
27	62.40	62.23	62.02	61.45	61.63	61.61	61.93	62.13	.....	60.57	64.10	.....
28	62.27	62.18	61.96	61.39	61.67	61.77	61.70	62.41	.....	60.55	64.32	.....
29	62.28	61.88	62.20	61.75	61.70	61.45	62.45	60.80	60.53	64.30	64.84	.....
30	62.40	61.69	61.45	61.23	61.52	61.51	62.54	60.71	62.25	64.29	64.30	.....
31	62.48	61.55	61.70	61.70	61.91	62.66	60.63	64.13	.....	64.13	.....	.....

83-7-2III. City of Cedar Rapids. Drilled unused artesian well, diameter 10 inches, reported depth 1,450 feet. Land-surface datum is about 733 feet above msl. Highest water level 20.92 below lsd, Apr. 15, 1940; lowest 81.65 below lsd, Aug 9, 1950. Records available: 1940-51.

Daily highest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	56.20	61.85	49.20	66.20	.....	63.15	.....	.....	58.25	60.00	62.10
2	.....	57.25	59.25	53.15	62.40	.....	61.80	.....	72.50	62.65	59.95	59.10
3	.....	57.25	57.65	54.85	66.75	64.90	.....	.....	68.15	65.20	59.10	58.40
4	.....	55.15	56.90	55.65	64.95	63.60	.....	.....	66.25	65.95	.....	62.15
5	.....	55.25	56.10	55.45	62.15	64.00	.....	66.10	66.55	66.10	.....	62.95
6	.....	58.45	57.75	56.05	56.80	62.85	.....	64.95	68.10	64.35	.....	61.40
7	.....	62.90	58.00	55.40	55.35	62.85	.....	69.15	.....	62.45	.....	63.45
8	.....	64.25	58.05	54.80	56.85	.....	.....	.....	.....	59.35	.....	63.45
9	.....	62.40	58.05	53.40	64.10	.....	.....	.....	.....	61.95	.....	63.00
10	.....	58.90	58.30	52.00	.....	62.80	.....	.....	.....	61.95	.....	59.65
11	.....	56.15	57.80	50.30	.....	62.40	.....	.....	.....	62.05	60.65	63.30
12	.....	55.00	56.85	48.20	.....	63.65	65.80	.....	.....	62.40	58.05	63.05
13	58.70	66.70	56.50	.....	63.60	64.90	64.75	.....	68.80	63.15	60.55	63.55
14	57.75	66.90	56.10	.....	65.75	65.15	.....	.....	67.60	59.55	61.65	63.95
15	57.05	63.05	.....	51.00	66.60	66.20	65.45	.....	67.65	58.95	61.65	.....
16	58.65	63.45	57.10	50.75	.....	65.50	64.70	.....	67.50	65.55	62.05	.....
17	59.40	58.80	57.50	52.35	.....	.....	.....	.....	66.50	64.95	61.40	.....
18	59.20	57.25	55.55	56.95	.....	.....	.....	.....	65.80	63.95	59.40	.....
19	61.00	56.50	54.75	55.15	.....	.....	.....	67.15	63.60	64.25	59.10	.....
20	.....	58.85	56.20	53.20	.....	.....	.....	.....	66.45	64.40	61.50	.....
21	.....	.....	56.40	53.35	.....	.....	.....	.....	66.90	62.45	61.50	.....
22	.....	.....	56.65	52.50	.....	.....	66.40	.....	65.70	62.10	56.90	.....
23	.....	.....	56.40	51.70	.....	.....	.....	.....	.....	62.85	56.45	.....
24	.....	59.25	56.35	56.25	.....	.....	.....	.....	.....	62.90	57.50	.....
25	.....	59.25	54.80	57.35	68.50	.....	.....	.....	.....	63.40	56.00	.....
26	.....	55.05	54.10	55.40	66.45	.....	.....	.....	.....	63.20	55.75	.....
27	.....	58.45	54.20	55.70	64.20	.....	.....	.....	.....	63.05	57.90	.....
28	54.50	58.15	.....	55.10	64.55	.....	.....	.....	.....	60.35	62.10	.....
29	54.70	.....	.....	.....	64.05	.....	65.20	.....	64.00	59.90	62.70	.....
30	56.10	.....	55.05	.....	.....	.....	63.85	.....	59.05	63.10	62.30	59.30
31	56.20	.....	54.20	.....	.....	.....	.....	.....	.....	60.45	58.00	.....

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	61.70	66.20	53.65	70.75	.....	66.15	.....	77.55	65.45	64.75	65.30
2	.....	62.20	65.10	61.55	70.80	70.20	67.35	.....	75.50	68.60	64.65	63.90
3	.....	63.70	59.60	63.35	70.50	69.10	.....	.....	71.35	69.70	64.50	64.55
4	.....	58.45	62.60	62.90	68.60	67.20	.....	72.85	71.40	71.25	.....	65.10
5	.....	64.70	61.00	62.90	66.60	66.65	.....	70.50	70.60	69.85	.....	64.55
6	.....	66.90	62.80	61.85	65.40	67.30	.....	72.75	72.80	65.90	.....	65.70
7	.....	67.05	62.80	58.25	65.50	66.10	.....	74.40	.....	64.70	.....	65.70
8	.....	66.45	61.85	56.80	66.60	.....	.....	.....	.....	65.05	.....	65.85
9	.....	66.30	61.65	56.75	67.80	.....	.....	.....	.....	65.55	.....	64.90
10	.....	64.70	62.25	61.70	.....	67.50	.....	.....	.....	65.45	.....	65.55
11	.....	61.90	59.35	53.00	.....	68.85	70.70	.....	.....	65.05	63.55	66.10
12	.....	67.75	59.75	.....	67.45	70.15	67.95	.....	72.50	65.40	63.35	65.10
13	64.20	68.65	63.75	.....	66.50	70.70	69.40	.....	70.40	65.20	63.35	65.95
14	62.15	68.40	60.75	54.30	70.15	71.05	69.60	.....	70.10	63.85	64.10	66.00
15	63.30	68.25	.....	53.60	71.90	71.15	68.40	.....	70.90	67.35	64.30	.....
16	66.50	67.80	.....	61.00	.....	69.85	72.45	.....	70.00	67.40	64.40	.....
17	63.95	67.30	63.20	61.45	.....	.....	.....	.....	69.80	67.05	64.50	.....
18	64.20	59.80	57.95	62.15	.....	.....	71.55	.....	69.65	67.50	63.00	.....
19	64.65	63.90	61.80	63.10	.....	.....	69.80	70.00	66.65	64.30	.....	.....
20	62.65	66.90	63.25	62.85	.....	.....	.....	70.80	66.70	63.90	.....	.....
21	.....	.....	62.80	62.95	.....	.....	73.55	.....	70.10	64.50	65.05	.....
22	.....	.....	59.90	55.40	.....	.....	70.30	.....	67.30	65.80	67.30	.....
23	.....	.....	62.25	62.35	.....	.....	.....	.....	.....	66.55	64.00	.....
24	.....	.....	58.90	63.60	72.15	.....	.....	.....	.....	67.05	64.45	.....
25	.....	60.05	57.35	63.90	73.95	.....	.....	.....	.....	66.20	58.70	.....
26	.....	65.15	59.05	64.45	72.50	.....	.....	.....	.....	65.55	64.15	.....
27	.....	65.70	64.50	64.35	66.45	.....	.....	.....	.....	65.80	64.65	.....
28	57.05	66.05	.....	.....	68.90	.....	72.90	.....	.....	64.85	65.35	.....
29	59.45	64.40	.....	70.15	.....	69.40	.....	.....	65.80	65.05	.....	.....
30	59.20	62.00	.....	.....	69.05	73.75	.....	62.60	65.45	64.80	65.80	.....
31	61.60	56.95	.....	.....	.....	.....	.....	.....	65.75	64.05	.....	.....

83-7-21P1. Kresge Co. Cedar Rapids. Drilled artesian well in dolomite of Silurian age. Highest water level 38.98 below lsd, Feb. 23, 1942; lowest 84.20 below lsd, May 28, 1948. Records available: 1941-51. Jan. 30, 66.60; Feb. 26, 67.86; Mar. 29, 68.60; Apr. 26, 68.15; Nov. 29, 71.38.

83-7-23G1. City of Cedar Rapids. Bever Park. Drilled artesian well, diameter 5 inches, depth 81 feet. Highest water level 1.48 below lsd, May 23, 1947; lowest 4.68 below lsd, Sept. 23, 1940, Aug. 19, 1941. Records available: 1940-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	2.77	Apr. 26	1.99	July 30	2.23	Oct. 30	1.88
Feb. 26	2.12	May 31	1.77	Aug. 28	2.25	Nov. 29	1.90
Mar. 29	1.87	June 28	2.36	Sept. 26	2.30	Dec. 27	1.86

83-7-24A1. John Zrudsky. Drilled unused artesian well in limestone, diameter 4 inches, depth 96 feet. Highest water level 23.56 below lsd, June 27, 1947; lowest 34.50 below lsd, July 30, 1943. Records available: 1940-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	29.40	Apr. 26	26.61	July 30	26.53	Oct. 30	28.72
Feb. 26	27.40	May 31	25.75	Aug. 28	29.31	Nov. 29	27.38
Mar. 29	26.79	June 28	26.26	Sept. 26	30.41		

83-7-32G1. Floyd Felter. 22d Ave. SW. and 11th St. SW., Cedar Rapids. Drilled unused artesian well in limestone, diameter 5 inches, depth 282 feet. Highest water level 75.88 below lsd, Jan. 26, 1942; lowest 87.44 below lsd, Aug. 31, 1950. Records available: 1940-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	86.27	Apr. 26	84.46	July 30	81.36	Oct. 30	81.73
Feb. 26	86.36	May 31	82.35	Aug. 28	82.52	Nov. 29	80.70
Mar. 29	85.86	June 28	81.89	Sept. 26	82.35	Dec. 27	82.28

83-7-33F1. Hedges Co. Realtors. 22d Ave SW. and K St. SW., Cedar Rapids. Drilled unused artesian well in limestone, diameter 5 inches, depth 107 feet. Highest water level 67.58 below lsd, Aug. 28, 1947; lowest 75.95 below lsd, Mar. 31, 1949. Records available: 1940-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	73.34	Apr. 26	73.24	July 30	72.21	Oct. 30	71.45
Feb. 26	73.41	May 31	73.03	Aug. 28	71.84	Nov. 29	71.44
Mar. 29	73.36	June 28	72.74	Sept. 26	71.49	Dec. 27	71.47

83-6-30B1. Dale Katz. Drilled unused artesian well, diameter 6 inches, depth 77 feet. Highest water level 44.26 below lsd, June 27, 1947; lowest 53.30 below lsd, June 30, 1942. Records available: 1940-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	51.60	Apr. 26	50.52	July 30	48.13	Oct. 30	49.65
Feb. 26	51.18	May 31	48.05	Aug. 28	49.23	Nov. 29	50.63
Mar. 29	50.15	June 28	48.32	Sept. 26	49.77		

82-7-3A2. Central Iowa Power Cooperative well 2. Drilled industrial artesian well in dolomite of Silurian age, diameter 12 inches, depth 446 feet, cased to 105. Land-surface datum is about 722 feet above msl. Highest water level 21.48 below lsd, May 31, 1950; lowest 38.91 below lsd, Apr. 27, 1950. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 26	29.42	Apr. 26	25.74	June 28	30.75	Oct. 30	37.22
Mar. 29	27.47	May 31	30.62	Sent. 26	33.66	Nov. 29	36.62

#### Lyon County

99-44-26R1. State of Iowa. Formerly Henry Hansmann. Drilled unused water-table well in glacial drift, diameter 20 inches, depth 38 feet, lined with tile. Highest water level 0.50 below lsd, June 26, 1951; lowest 9.74 below lsd, Oct. 24, 1940. Records available: 1940-43, 1947-51. Apr. 3, 2.49; June 26, 0.50; Oct. 2, 1.52.

98-48-24M1. A. C. Hanson. Drilled unused water-table well in glacial sand, diameter 24 inches, depth 25 feet, lined with tile. Highest water level 8.26 below lsd, Mar. 26, 1948; lowest 19.58 below lsd, Aug. 25, 1939. Records available: 1939-43, 1948. No measurement made in 1951.

Madison County

75-28-2B1. Glen Newton. Drilled unused water-table well in glacial drift, diameter 24 inches, depth 32 feet, cribbed with rock. Highest water level 9.93 below lsd, Oct. 23, 1946; lowest 20.59 below lsd, Oct. 1, 1943. Records available: 1940-51. Mar. 28, 14.82; June 21, 13.60; Sept. 13, 14.94.

Marion County

76-19-5N1. City of Knoxville well 4. Drilled unused water-table well in alluvial sand and gravel, diameter 40 to 24 inches, depth 47 feet, finished with screen. Water levels affected by nearby pumping wells. Land-surface datum is 720 feet above msl. Measurements were made by Knoxville Water Dept. Highest water level 2.70 below lsd, June 8, 1951, lowest 21.65 below lsd, Feb. 7, 1950. Records available: 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	19.72	Mar. 3	20.00	Apr. 7	10.00	June 2	9.90
27	19.80	10	20.20	May 12	4.50	8	2.70
Feb. 3	19.80	17	20.40	19	7.50	30	9.70
24	20.10	24	20.40	26	8.20		

75-20-22H1. Union Central Life Insurance Co. Dug unused water-table well in glacial drift, diameter 5 feet, depth 15 feet, cribbed with brick. Highest water level 1.60 below lsd, June 21, 1945; lowest 13.07 below lsd, Feb. 10, 1941. Records available: 1940-51. Mar. 28, 6.02; June 20, 1.86; Sept. 13, 4.60.

75-29-31C2. Amanda Elliot. Drilled unused water-table well in glacial drift, diameter 15 inches, depth 29 feet, lined with tile. Highest water level 2.31 below lsd, June 11, 1947; lowest 22.61 below lsd, Sept. 13, 1951. Records available: 1940-51. Mar. 28, 7.10; June 20, 7.00; Sept. 13, 22.61.

74-21-11F1. Town of Melcher test well 5. Drilled observation artesian well in glacial sand and gravel, diameter 6 inches, depth 101 feet. Land-surface datum is 931.6 feet above msl. Water levels affected by nearby pumping well. Highest water level 32.91 below lsd, June 17, 1945; lowest 87.96 below lsd, Oct. 24, 1948. Records available: 1945-46, 1948-51. Jan. 19, 66.95; Mar. 28, 63.33; June 20, 60.76; Sept. 13, 78.50.

74-21-11K1. Town of Melcher test well 3. Drilled observation artesian well in glacial sand and gravel, diameter 6 inches, depth 119 feet, cased to 76. Water levels affected by nearby well pumping. Land-surface datum is 942.8 feet above msl. Highest water level 46.03 below lsd, July 14, 1945; lowest 108.85 below lsd, Dec. 4, 6, 7, 1949. Records available: 1945-51.

## Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	81.75	.....	78.00	77.90	.....	76.35	.....
2	81.60	.....	78.20	77.95	.....	76.35	.....
3	81.40	.....	78.50	77.90	.....	76.55	76.15
4	81.70	.....	78.15	77.85	.....	76.55	76.45
5	81.60	.....	78.30	77.75	.....	76.55	76.35
6	81.90	.....	78.95	77.45	.....	76.40	76.20
7	81.60	.....	79.15	.....	.....	76.05	75.95
8	81.40	.....	79.30	.....	.....	76.20	76.10
9	81.00	.....	79.35	.....	.....	76.35	76.25
10	81.15	79.75	79.00	.....	.....	76.40	76.30
11	81.15	79.45	78.95	.....	.....	76.25	76.35
12	81.00	79.60	78.90	.....	.....	76.20	76.35
13	81.00	80.15	78.50	.....	.....	76.30	76.35
14	80.70	80.30	78.45	.....	.....	76.35	76.30
15	80.75	79.95	78.65	.....	.....	76.20	76.20
16	80.55	79.45	78.45	.....	.....	76.10	76.30
17	80.40	79.50	78.30	.....	.....	76.25	76.25
18	80.35	79.40	78.40	.....	.....	76.25	76.25
19	80.35	79.45	78.45	.....	.....	76.15	76.15
20	80.65	79.45	78.45	.....	.....	76.15	76.35
21	81.15	79.65	78.45	.....	.....	76.15	76.35
22	80.25	79.70	77.95	.....	76.45	76.15	76.40
23	80.40	79.70	77.85	.....	76.55	76.30	76.35
24	80.60	79.45	78.45	.....	76.35	76.35	76.30
25	80.60	79.15	78.25	.....	76.25	76.35	76.30

74-21-11K1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
26	80.05	79.10	78.15	.....	76.25	76.15	76.25
27	80.45	79.40	77.80	.....	76.35	76.05	76.30
28	80.65	78.90	77.75	.....	76.45	76.40	76.35
29	.....		77.75	.....	76.40	76.30	76.35
30	.....		77.85	.....	76.55	76.20	76.35
31	.....		77.90		76.35		76.40

\*No record for August, September, October, November, and December.

## Daily highest water level from recorder graph\*

Day	Aug.	Sept.	Oct.	Nov.	Day	Aug.	Sept.	Oct.	Nov.
1	76.35	100.90	96.65	101.95	17	100.15	94.45	98.79	.....
2	86.80	102.95	95.75	104.15	18	103.50	92.95	99.25	.....
3	93.15	101.05	98.05	103.25	19	102.05	91.55	100.15	.....
4	96.45	101.75	99.15	104.55	20	104.75	91.20	99.60	.....
5	99.40	102.35	97.95	104.80	21	102.90	93.40	97.55	.....
6	96.40	101.55	96.05	105.20	22	104.90	94.05	97.00	.....
7	94.70	102.00	95.65	105.15	23	102.45	93.25	96.30	.....
8	100.45	102.35	98.65	104.95	24	100.60	93.65	96.00	.....
9	97.55	101.25	98.20	.....	25	101.90	95.90	98.05	.....
10	98.10	100.05	98.10	.....	26	100.15	98.35	98.25	.....
11	98.95	100.90	95.55	.....	27	100.60	96.80	97.45	.....
12	97.95	.....	96.35	.....	28	100.40	99.40	99.55	.....
13	101.85	.....	94.45	.....	29	98.40	98.85	99.55	.....
14	99.45	99.95	94.00	.....	30	101.90	99.45	98.70	.....
15	98.15	98.05	96.85	.....	31	101.15		100.15	
16	102.45	98.15	98.15	.....					

\*No record for January, February, March, April, May, June, July, and December.

## Daily lowest water level from recorder graph\*

Day	Aug.	Sept.	Oct.	Nov.	Day	Aug.	Sept.	Oct.	Nov.
1	86.80	103.60	99.45	105.75	17	103.50	96.15	102.45	.....
2	98.40	105.45	100.60	105.90	18	105.95	94.45	103.25	.....
3	98.40	103.85	102.35	106.00	19	104.75	92.95	104.40	.....
4	100.95	104.95	102.45	106.30	20	106.45	95.85	102.55	.....
5	103.50	104.75	99.15	106.60	21	105.10	98.65	99.60	.....
6	100.00	104.50	97.95	106.70	22	106.50	98.15	99.55	.....
7	100.45	105.10	101.55	106.75	23	104.90	97.80	98.65	.....
8	103.90	105.10	103.10	106.30	24	104.25	98.50	101.20	.....
9	100.75	103.60	100.55	.....	25	104.50	100.65	102.75	.....
10	101.85	103.95	98.20	.....	26	103.20	100.35	100.55	.....
11	102.35	104.55	100.75	.....	27	104.50	99.65	102.60	.....
12	101.85	.....	98.50	.....	28	102.95	101.90	104.15	.....
13	104.95	.....	96.35	.....	29	101.90	104.15	102.20	.....
14	102.40	101.95	99.95	.....	30	104.85	102.05	103.15	.....
15	102.80	99.95	100.55	.....	31	104.70		104.35	
16	105.15	98.05	101.95	.....					

\*No record for January, February, March, April, May, June, July, and December.

74-21-11K2. Town of Melcher. Drilled unused water-table well in glacial drift, diameter 18 inches, depth 25 feet, lined with tile. Highest water level 3.10 below lsd, June 7, 1951; lowest 13.90 below lsd, Nov. 3, 1950. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	12.40	Apr. 5	6.50	July 5	5.30	Oct. 4	11.30
11	12.50	12	6.40	12	5.30	11	10.40
18	12.70	19	5.30	19	6.40	18	10.90
25	12.30	26	5.20	26	7.50	25	8.40
Feb. 1	12.40	May 3	3.60	Aug. 2	8.40	Nov. 1	8.50
8	12.30	10	4.10	9	9.50	8	8.50
15	12.30	17	3.60	16	10.40	15	6.40
22	9.70	24	4.30	23	10.20	22	6.50
Mar 1	10.10	31	3.40	30	9.60	29	6.60
8	9.20	June 7	3.10	Sept. 6	10.30	Dec. 6	6.50
15	9.30	14	4.50	13	9.10	13	6.70
22	9.40	21	5.40	20	11.30	20	6.90
29	7.20	28	5.50	27	11.40	27	6.80

74-20-22C1. Grant DeWitt. Dug unused water-table well in glacial drift, diameter  $4\frac{1}{2}$  feet, depth 32 feet, cribbed with brick. Highest water level 2.60 below lsd, Apr. 23, 1947; lowest 25.18 below lsd, Dec. 21, 1950. Records available: 1942-51. May 29, 20.42; June 20, 5.91; Sept. 12, 11.87.

74-20-33D1. T. V. Beebout. Drilled unused water-table well in glacial drift, diameter 24 inches, depth 29 feet, cribbed with brick. Highest water level 2.18 below lsd, Apr. 23, 1947; lowest 27.39 below lsd, Apr. 16, 1940. Records available: 1940-51. Mar. 29, 16.23; June 20, 12.74; Sept. 12, 11.73.

#### Marshall County

84-18-22H1. City of Marshalltown. Jetted observation artesian well in glacial sand and gravel, diameter 3 inches, depth 225 feet, cased to 225. Highest water level 4.97 below lsd, Oct. 1, 1951; lowest 15.40 below lsd, Aug. 6, 1949. Records available: 1949-51. Feb. 5, 13.55; July 13, 5.37; July 27, 5.14; Oct. 1, 4.97.

84-18-24Q1. City of Marshalltown. Drilled unused artesian well in glacial sand and gravel, diameter 8 inches, depth 200 feet, cased to 190, screen 190-200. Land-surface datum is about 871 feet above msl. Highest water level 4.92 below lsd, July 13, 1951; lowest 15.43 below lsd, Dec. 21, 1950. Records available: 1949-51. Feb. 6, 14.86; Apr. 2, 6.61; June 25, 5.57; July 13, 4.92; July 27, 5.92; Oct. 1, 6.78.

#### Montgomery County

71-36-6J1. Donald Templeton. Drilled observation water-table well in glacial drift, diameter  $1\frac{1}{2}$  inches, depth 38 feet, screen 36-38. Highest water level 2.52 below lsd, May 31, 1951; lowest 30.99 below lsd, Apr. 26, 1950. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	14.98	July 19	12.48	Sept. 30	13.85	Nov. 29	14.49
May 31	2.52	Aug. 28	13.10	Oct. 30	15.05	Dec. 27	15.95
June 27	11.95						

#### Tarkio Creek Valley

72-38-24P1. Formerly 72. O. A. Milner. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 25 feet. Highest water level 1.46 below lsd, May 31, 1951; lowest 16.36 below lsd, Apr. 5, 1938. Records available: 1937-51.

Jan. 24	12.17	Apr. 27	2.25	July 19	5.32	Oct. 30	9.80
Feb. 22	11.46	May 31	1.46	Aug. 28	5.12	Nov. 29	10.42
Mar. 21	9.20	June 27	2.78	Sept. 30	9.14	Dec. 27	9.80

72-37-29C1. Formerly 82. U. S. Geol. Survey. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 40 feet. Highest water level 4.70 below lsd, June 24, 1947; lowest 34.64 below lsd, May 18, 1938. Records available: 1937-51.

Jan. 24	15.26	Apr. 27	8.93	July 19	7.14	Oct. 30	15.45
Feb. 22	17.92	May 31	5.14	Aug. 28	6.97	Nov. 29	15.55
Mar. 21	15.17	June 27	4.90	Sept. 30	13.15	Dec. 27	17.77

71-38-11R1. Formerly 7. E. F. Holquist. Dug unused water-table well in glacial drift, diameter 36 inches, depth 28 feet, cribbed with brick. Highest water level 3.64 below lsd, June 24, 1947; lowest 25.15 below lsd, Jan. 26, 1944. Records available: 1934-51.

Jan. 24	18.63	July 19	7.02	Sept. 30	13.71	Nov. 29	18.60
May 31	4.59	Aug. 28	12.50	Oct. 30	17.28	Dec. 27	11.00
June 27	3.92						

71-38-35B1. Formerly 78. Mr. Mainquist. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 18 feet. Highest water level 0.34 below lsd, Apr. 27, 1951; lowest 14.53 below lsd, Dec. 29, 1950. Records available: 1937-51.

Jan. 24	8.03	May 31	2.43	Aug. 28	7.99	Nov. 29	12.40
Feb. 22	10.18	June 27	3.50	Sept. 30	8.43	Dec. 27	12.20
Apr. 27	.34	July 19	5.80	Oct. 30	11.16		

71-38-35E1. Formerly 79. U. S. Geol. Survey. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 29 feet. Highest water level 0.35 below lsd, June 27, 1951; lowest 22.67 below lsd, May 3, 1938. Records available: 1937-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	5.75	Apr. 27	7.06	July 19	0.98	Oct. 30	4.02
Feb. 22	6.90	May 31	.68	Aug. 28	1.34	Nov. 29	5.37
Mar. 21	1.30	June 27	.35	Sept. 30	1.60	Dec. 27	5.72

#### Muscatine County

76-2-10J1. Grain Processing Corp. Driven observation water-table well in alluvial sand, diameter 1 inch, depth 45 feet, screen 43-45. Water levels affected by nearby pumping well. Highest water level 7.34 below lsd, June 19, 1950; lowest 15.20 below lsd, Dec. 20, 1950. Records available: 1949-51. Mar. 30, 13.68; June 19, 11.01; Sept. 14, 12.89.

76-2-14D1. City of Muscatine test well 4. Drilled observation water-table well in alluvial sand, diameter 2 inches, depth 39 feet. Water levels affected by nearby pumping wells. Highest water level 4.15 below lsd, July 19, 1943; lowest 14.38 below lsd, Dec. 20, 1950. Records available: 1939-51. Mar. 30, 12.46; June 19, 9.99; Sept. 14, 11.81.

76-2-15A1. City of Muscatine well 5. Drilled observation water-table well in alluvial sand, diameter 2 inches, depth 32 feet. Water levels affected by nearby pumping wells. Highest water level 3.06 below lsd, July 19, 1943; lowest 13.80 below lsd, Oct. 5, 1948. Records available: 1940-51. Mar. 30, 12.38; June 19, 8.70; Sept. 14, 12.59.

#### Page County

69-36-31A1. Schulze Baking Co. Dug unused water-table well in glacial drift, diameter 30 inches, depth 13 feet, cribbed with brick. Highest water level 2.44 below lsd, May 1, 1951; lowest 10.23 below lsd, Jan. 29, 1951. Records available: 1950-51.

#### Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.73	....	8.29	5.56	h2.44	5.50	5.36	....	h7.05	h7.43	8.14	8.24
2	9.73	....	8.20	5.81	....	3.70	5.57	....	7.08	7.43	8.18	8.21
3	9.71	10.13	7.29	5.98	....	4.19	4.97	....	7.19	7.50	8.03	8.24
4	9.79	10.09	7.53	6.13	4.08	4.70	5.41	....	7.24	7.58	8.21	8.29
5	9.83	10.09	7.50	6.24	4.56	5.05	5.27	....	7.25	7.73	8.27	8.25
6	9.93	9.90	7.66	6.12	5.06	....	....	....	6.50	7.30	8.26	h8.20
7	9.91	10.07	7.76	5.97	5.27	....	....	....	6.80	7.19	8.29	8.40
8	....	....	7.91	5.97	5.42	h5.05	h4.70	....	7.07	7.38	8.22	8.50
9	....	h10.08	7.92	6.04	5.34	5.28	5.10	....	....	h7.48	8.28	8.53
10	9.87	10.05	7.57	6.17	4.11	5.49	5.39	....	....	7.55	8.32	8.46
11	9.92	10.00	7.11	6.20	4.35	5.49	5.43	....	....	7.58	8.27	8.47
12	9.91	9.97	7.30	6.12	4.72	5.70	5.67	....	....	7.67	7.24	8.46
13	9.95	10.13	....	6.08	5.04	5.40	5.81	....	....	7.72	....	8.55
14	9.91	10.21	....	6.18	5.32	5.75	5.93	....	....	7.78	h7.70	8.55
15	9.95	10.18	h7.40	6.40	5.55	5.82	6.00	....	....	7.80	7.84	....
16	9.90	10.12	7.31	6.51	h4.63	4.44	....	....	....	7.86	7.96	....
17	h9.90	10.11	7.19	6.45	5.06	4.92	h6.32	....	h6.55	7.94	8.08	....
18	9.92	9.98	7.25	6.50	5.39	5.27	....	....	6.65	7.55	8.03	....
19	9.93	10.00	7.29	6.75	5.11	5.44	....	....	6.75	7.73	8.05	....
20	10.02	h9.97	7.34	6.79	5.48	....	....	....	6.82	7.64	8.04	....
21	10.12	10.04	7.38	4.77	5.57	....	....	....	7.01	7.69	8.01	....
22	10.00	10.08	6.79	5.37	5.68	....	....	....	7.06	7.84	8.11	....
23	10.04	10.11	6.55	5.49	5.86	h4.20	....	....	7.12	7.91	8.19	....
24	10.11	10.08	6.65	5.19	5.95	....	....	....	7.20	....	8.25	....
25	10.15	9.14	6.55	4.17	6.06	....	....	....	7.10	....	8.00	....
26	10.07	7.88	6.41	4.45	....	h4.16	....	....	7.01	....	8.14	....
27	10.13	8.17	6.31	4.59	....	....	....	....	7.42	....	....	h8.81
28	10.20	7.84	4.42	4.92	....	....	....	....	7.40	....	h8.20	8.77
29	10.23	....	4.45	5.19	h5.37	....	....	....	7.33	h7.90	8.22	8.87
30	h10.22	....	h5.05	4.37	5.58	h5.07	....	....	7.40	7.96	8.25	8.70
31	....	....	5.27	5.03	....	....	....	....	8.11	....	8.64	....

h Tape measurement.

## Tarkio Creek Valley

70-37-17J1. Formerly 10. R. Palmquist. Drilled unused water-table well in glacial drift, diameter 12 inches, depth 40 feet, lined with tile. Highest water level 11.12 below lsd, Mar. 30, 1942; lowest 27.59 below lsd, Nov. 27, 1945. Records available: 1934-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	24.73	Apr. 27	12.78	July 19	14.86	Oct. 30	22.03
Feb. 22	23.85	May 29	13.97	Aug. 28	20.39	Nov. 29	24.28
Mar. 21	21.70	June 27	11.30	Sept. 30	19.76	Dec. 27	13.97

70-37-17R1. Formerly 11. R. Palmquist. Drilled unused water-table well in glacial drift, diameter 12 inches, depth 26 feet, lined with tile. Highest water level 0.82 below lsd, Apr. 27, 1951; lowest 11.32 below lsd, Aug. 29, 1942. Records available: 1934-51.

Jan. 24	7.68	Apr. 27	0.82	July 18	4.15	Oct. 30	6.37
Feb. 22	7.86	May 29	2.27	Aug. 28	4.92	Nov. 29	2.95
Mar. 21	4.34	June 27	2.32	Sept. 30	3.00	Dec. 27	6.20

69-39-35B1. Formerly 44A. Elsie Nordstrom. Drilled observation water-table well in glacial drift, diameter 8 inches, depth 30 feet. Highest water level 2.79 below lsd, Apr. 25, 1944; lowest 22.22 below lsd, Dec. 22, 1948. Records available: 1937-51.

Jan. 22	18.60	Apr. 27	6.97	July 18	6.88	Oct. 25	9.23
Feb. 22	19.89	May 29	3.46	Aug. 27	5.20	Nov. 27	10.60
Mar. 19	12.42	June 25	6.34	Sept. 26	6.99	Dec. 26	12.01

69-39-35B2. Formerly 47. Elsie Nordstrom. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 27 feet. Highest water level 1.52 below lsd, Apr. 25, 1944; lowest 21.57 below lsd, Nov. 22, 1948. Records available: 1937-51.

Jan. 22	18.30	Apr. 27	14.32	July 18	10.51	Oct. 25	10.99
Feb. 22	18.97	May 29	11.73	Aug. 27	9.80	Nov. 27	11.26
Mar. 19	10.55	June 25	10.82	Sept. 26	15.62	Dec. 26	7.60

69-39-35D1. Formerly 83. Elsie Nordstrom. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 33 feet. Highest water level 6.92 below lsd, May 29, 1951; lowest 31.73 below lsd, Feb. 26, 1940. Records available: 1938-51.

Jan. 22	16.30	Apr. 27	10.32	July 18	10.15	Oct. 30	12.43
Feb. 22	17.95	May 29	6.92	Aug. 27	9.68	Nov. 27	13.32
Mar. 19	10.25	June 25	8.59	Sept. 26	12.05	Dec. 26	8.05

69-39-35D2. Formerly 84. Elsie Nordstrom. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 28 feet. Highest water level 4.17 below lsd, June 25, 1951; lowest 32.19 below lsd, Feb. 26, 1940. Records available: 1938-51.

Jan. 22	15.90	Apr. 27	10.05	July 18	9.83	Oct. 30	12.20
Feb. 22	17.56	May 29	6.38	Aug. 27	10.47	Nov. 27	13.20
Mar. 19	10.77	June 25	4.17	Sept. 26	10.00	Dec. 26	6.34

69-39-35D4. Formerly 86. Elsie Nordstrom. Drilled observation water-table well in glacial drift, diameter 9 inches, depth 27 feet. Highest water level 2.82 below lsd, June 25, 1951; lowest 24.28 below lsd, Feb. 26, 1940. Records available: 1938-51.

Jan. 22	10.22	Apr. 27	4.64	July 18	5.54	Oct. 30	8.37
Feb. 22	11.38	May 29	3.45	Aug. 27	5.62	Nov. 27	8.37
Mar. 19	10.99	June 25	2.82	Sept. 26	6.43	Dec. 26	6.39

69-39-35D5. Formerly 87. Elsie Nordstrom. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 25 feet. Highest water level 1.08 below lsd, Apr. 20, 1951; lowest 19.16 below lsd, Feb. 26, 1940. Records available: 1938-51.

Jan. 22	4.30	Apr. 20	1.08	July 18	1.67	Oct. 30	3.20
Feb. 22	7.92	May 29	1.79	Aug. 27	1.90	Nov. 27	7.87
Mar. 19	4.38	June 25	2.43	Sept. 26	2.37	Dec. 26	5.68

69-38-18N1. Formerly 6. T. Slickerveer. Drilled unused water-table well in glacial drift, diameter 12 inches, depth 50 feet, lined with tile. Highest water level 0.24 below lsd, July 18, 1951; lowest 9.74 below lsd, Feb. 15, 1939. Records available: 1934-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	3.68	Apr. 27	0.56	July 18	0.24	Oct. 25	1.96
Feb. 22	3.50	May 29	1.40	Aug. 27	1.55	Nov. 27	3.03
Mar. 21	1.40	June 25	1.27	Sept. 30	1.60	Dec. 26	2.75

69-38-30G1. Formerly 71. John Snyder. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 20 feet. Highest water level 1.16 below lsd, Apr. 25, 1944; lowest 13.44 below lsd, Nov. 25, 1941. Records available: 1937-51.

Jan. 22	7.59	May 29	2.53	Aug. 27	2.90	Nov. 29	2.50
Feb. 22	6.90	June 25	3.14	Sept. 26	4.10	Dec. 26	6.33
Mar. 19	6.08	July 18	4.51	Oct. 25	6.34		

69-38-30H1. Formerly 70. John Snyder. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 24 feet. Highest water level 0.49 below lsd, Mar. 26, 1946; lowest 9.79 below lsd, Jan. 30, 1941. Records available: 1937-51.

Jan. 22	6.98	June 25	1.07	Sept. 27	3.06	Nov. 29	5.30
Feb. 22	6.99	July 18	2.05	Oct. 25	4.69	Dec. 26	6.07
May 29	1.02	Aug. 27	2.38				

69-38-34B1. Formerly 80. Mr. Burton. Drilled observation water-table well in glacial drift, diameter 1 $\frac{1}{4}$  inches, depth 35 feet, screen 33-35. Highest water level 6.85 below lsd, June 27, 1951; lowest 36.02 below lsd, Jan. 25, 1938. Records available: 1937-51.

Jan. 24	27.65	Apr. 27	10.89	July 19	11.32	Oct. 30	19.10
Feb. 22	31.20	May 29	11.30	Aug. 28	11.80	Nov. 29	20.65
Mar. 21	20.80	June 27	6.85	Sept. 30	13.88	Dec. 27	21.04

69-37-20M1. Formerly 12. Amil Windhorst. Dug unused water-table well in glacial drift, diameter 36 inches, depth 63 feet, cribbed with brick. Highest water level 5.03 below lsd, June 27, 1951; lowest 46.54 below lsd, Oct. 22, 1948. Records available: 1934-51.

Jan. 24	21.83	Apr. 27	15.87	July 19	7.43	Oct. 30	17.88
Feb. 22	22.10	May 29	6.99	Aug. 28	14.77	Nov. 29	18.92
Mar. 21	21.93	June 27	5.03	Sept. 30	16.15	Dec. 27	19.62

69-37-20M2. Formerly 13. Amil Windhorst. Drilled domestic water-table well in glacial drift, diameter 12 inches, depth 58 feet, lined with tile. Highest water level 4.39 below lsd, June 27, 1951; lowest 53.66 below lsd, Dec. 30, 1943. Records available: 1934-46, 1949-51.

Jan. 24	17.54	Apr. 27	13.46	July 18	6.30	Oct. 30	15.40
Feb. 22	18.10	May 29	6.40	Aug. 28	12.40	Nov. 29	16.20
Mar. 21	16.95	June 27	4.39	Sept. 30	13.28	Dec. 27	16.61

68-38-7N1. Formerly 5. John Toft. Drilled unused water-table well in glacial drift, diameter 12 inches, depth 44 feet, lined with tile. Highest water level 1.44 below lsd, June 23, 1947; lowest 19.44 below lsd, Mar. 28, 1938. Records available: 1934-51.

Jan. 22	14.10	Apr. 27	7.75	July 18	7.21	Oct. 25	11.58
Feb. 23	14.70	May 29	4.54	Aug. 27	8.10	Nov. 29	13.71
Mar. 19	11.50	June 25	4.34	Sept. 26	9.47	Dec. 26	12.24

68-38-29P1. Formerly 76. Metropolitan Life Insurance Co. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 18 feet. Highest water level 4.82 below lsd, Mar. 27, 1942; lowest 15.44 below lsd, June 22, 1948. Records available: 1937-51.

Jan. 22	12.34	May 29	9.22	Aug. 27	9.64	Nov. 27	7.00
Feb. 22	12.95	June 25	7.45	Sept. 27	7.40	Dec. 26	10.58
Mar. 19	10.12	July 18	9.00	Oct. 25	14.67		

67-38-20Q1. Formerly 17. Albert Nordholm. Dug unused water-table well in glacial drift, diameter 36 inches, depth 20 feet, cribbed with brick. Highest water level 9.88 below lsd, June 23, 1947; lowest 21.05 below lsd, Aug. 25, 1948. Records available: 1934-51.

Jan. 22	17.38	Apr. 27	10.58	July 18	13.60	Oct. 25	14.60
Feb. 22	17.85	May 29	12.56	Aug. 27	13.04	Nov. 27	12.43
Mar. 19	16.05	June 25	11.69	Sept. 26	14.10	Dec. 26	16.98

67-38-21C1. Formerly 15. Metropolitan Life Insurance Co. Drilled unused water-table well in glacial drift, diameter 12 inches, depth 29 feet, lined with tile. Highest water level 0.50 below lsd, Apr. 25, 1944; lowest 11.22 below lsd, Sept. 24, 1941. Records available: 1934-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	11.04	June 25	0.55	Aug. 27	0.85	Oct. 25	3.11
Mar. 19	3.12	July 18	1.60	Sept. 26	1.91	Dec. 26	4.20
May 29	.93						

#### Palo Alto County

97-34-29N1. J. D. Westergard. Drilled unused water-table well in glacial drift, diameter 20 inches, depth 8 feet, lined with tile. Highest water level 0.13 below lsd, Mar. 28, 1945; lowest 5.50 below lsd, Oct. 3, 1940. Records available: 1940-51. June 27, 0.47; Oct. 3, 1.51.

97-34-30Q1. Norman Broadwell. Dug domestic water-table well in glacial drift, diameter 48 to 18 inches, depth 25 feet, cribbed with rock. Highest water level 16.14 below lsd, July 23, 1944; lowest 19.46 below lsd, Oct. 2, 1940. Records available: 1940-45, 1948-51. Apr. 4, 16.93; June 27, 16.25; Oct. 3, 16.27.

98-34-6J1. Electric Park. Drilled water-table well in glacial drift, diameter 18 inches, depth 20 feet, lined with tile. Highest water level 3.10 above lsd, Mar. 29, 1944; lowest 2.94 below lsd, June 22, 1949. Records available: 1940-51. Apr. 4, -0.77; June 27, +0.08; Oct. 3, +0.92.

#### Polk County

78-24-4P1. S. S. Kresge Co. 7th and Locust Sts., Des Moines. Drilled unused water-table well in alluvial sand and gravel, diameter 12 inches, depth 58 feet. Highest water level 26.41 below lsd, June 10, 1947; lowest 32.35 below lsd, June 22, 1949. Records available: 1943-51. Mar. 27, 30.62; June 22, 28.76; Sept. 13, 30.53.

79-22-22A1. J. G. Reed. Dug unused water-table well in glacial drift, diameter 36 inches, depth 39 feet, cribbed with drain tile. Highest water level 2.23 below lsd, Mar. 31, 1942; lowest 8.55 below lsd, Dec. 22, 1950. Records available: 1940-51. Mar. 27, 5.35; June 22, 2.82; Sept. 13, 4.86.

78-25-10N1. City of West Des Moines. Drilled unused water-table well in alluvial sand and gravel, diameter 12 inches, depth 24 feet, finished with screen. Water levels affected by nearby pumping wells. Recording gage placed on well Sept. 25, 1951. Highest water level 17.09 below lsd, Nov. 21, 1951; lowest 18.40 below lsd, Oct. 2, 1951. Records available: 1951.

#### Daily noon water level from recorder graph

Day	Sept.	Oct.	Nov.	Dec.	Day	Sept.	Oct.	Nov.	Dec.
1	.....	18.10	18.09	17.84	17	.....	17.81	17.79	17.48
2	.....	18.40	17.94	17.71	18	.....	17.79	17.79	17.53
3	.....	18.32	17.86	17.74	19	.....	17.75	18.19	17.73
4	.....	18.27	17.91	18.07	20	.....	17.75	17.94	17.80
5	.....	18.19	17.91	.....	21	.....	17.73	17.09	17.58
6	.....	18.07	17.83	17.37	22	.....	17.94	17.78	17.62
7	.....	18.03	17.82	17.83	23	.....	17.99	17.74	17.74
8	.....	17.97	17.90	17.84	24	.....	17.88	17.77	17.64
9	.....	17.93	17.89	17.77	25	17.98	17.83	17.66	.....
10	.....	17.97	17.92	17.71	26	17.85	18.04	17.67	.....
11	.....	18.06	17.87	17.61	27	17.97	18.26	18.00	17.86
12	.....	18.11	17.73	17.55	28	17.68	18.17	17.70	17.50
13	.....	18.10	17.67	17.78	29	17.68	18.20	17.81	17.32
14	.....	.....	17.88	17.90	30	17.88	.....	17.99	17.47
15	.....	.....	17.75	17.96	31		18.15		18.06
16	.....	17.81	17.79	17.54					

#### Pottawattamie County

74-44-13J1. U. S. Geol. Survey. Lake Manawa area near Howards store. Driven observation water-table well in alluvium, diameter 1½ inches, depth 13 feet, screen 11-13. Highest water level 3.00 below lsd, May 2, 1951; lowest 8.11 below lsd, Dec. 22, 1951. Records available: 1950-51.

74-44-13J1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 10, 1950	5.79	May 2, 1951	3.00	June 27, 1951	3.37	Sept. 26, 1951	7.10
Apr. 5, 1951	7.28	8	4.10	July 10	4.85	Oct. 9	7.34
7	7.19	14	4.55	16	5.40	16	7.46
8	7.20	23	4.80	26	5.82	30	7.62
8	7.16	31	4.70	Aug 18	6.37	Nov. 15	7.84
9	6.96	June 5	4.00	28	6.42	Dec. 3	7.94
10	6.77	15	4.20	Sept. 13	6.88	22	8.11
23	5.01						

74-44-16M1. U. S. Corps of Engineers. Levee relief well near South Omaha bridge. Drilled levee relief well in alluvium, diameter  $6\frac{1}{2}$  inches, depth 37 feet, screened with wood. Highest water level 1.10 above lsd, May 2, 1951; lowest 4.60 below lsd, Dec. 3, 1951. Records available: 1951.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 7	-1.62	May 23	-0.05	July 16	-0.40	Oct. 9	-3.55
8	-1.05	31	.10	26	1.08	16	3.70
23	-.05	June 5	.70	Aug. 18	1.89	30	3.84
May 2	+1.10	15	.30	28	2.32	Nov. 15	4.13
8	-.44	27	.05	Sept. 13	2.40	Dec. 3	4.60
14	-.60	July 10	.00	26	3.21	22	4.52

74-44-18E1. U. S. Geol. Survey. Lake Manawa area, northeast corner of Manawa Park, Driven observation water-table well in alluvium, diameter  $1\frac{1}{4}$  inches, depth 16 feet, screen 14-16. Highest water level 0.45 below lsd, May 2, 1951; lowest 6.60 below lsd, Nov. 10, 1950. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 10, 1950	6.60	May 2, 1951	0.45	June 27, 1951	3.03	Sept. 26, 1951	5.38
Apr. 5, 1951	4.69	8	1.71	July 10	2.25	Oct. 9	5.62
7	4.56	14	1.50	16	3.50	16	5.70
8	4.40	23	2.75	26	4.02	30	5.94
8	4.34	31	2.74	Aug. 18	4.59	Nov. 15	6.19
9	4.21	June 5	1.55	28	4.55	Dec. 3	6.31
10	4.17	15	2.55	Sept. 13	5.07	22	6.42
23	2.39						

#### Sac County

89-38-26A2. City of Schaller. Drilled public-supply artesian well in Dakota sandstone, diameter 10 to 8 inches, depth 352 feet, cased to 352, perforations 304-352. Highest water level 209.92 below lsd, Oct. 7, 1948; lowest 225.02 below lsd, May 2, 1947. Records available: 1940-51. Apr. 3, 220.78; June 26, 220.56; Oct. 2, 220.35.

87-37-21A1. Wayne Ogren. Dug unused water-table well in glacial drift, diameter 5 feet, depth 13 feet, cribbed with brick. Highest water level 3.86 below lsd, June 28, 1945; lowest 10.42 below lsd, Oct. 7, 1948. Records available: 1942-51. Apr. 3, 5.12; June 26, 4.67; Oct. 2, 3.90.

86-36-2C1. John Christian. Drilled unused water-table well in glacial drift, diameter 20 inches, depth 20 feet, lined with tile. Highest water level 0.85 below lsd, Dec. 31, 1945; lowest 11.60 below lsd, Oct. 7, 1948. Records available: 1940-51. Apr. 3, 2.10; Oct. 2, 2.57.

86-36-4N1. State Conservation Commission. Dug unused water-table well in glacial drift, diameter 36 inches, depth 9 feet, cribbed with concrete blocks. Highest water level 2.48 below lsd, June 28, 1945; lowest 6.57 below lsd, Oct. 7, 1948. Records available: 1940-51. Apr. 3, 3.58; Oct. 2, 5.25.

Sioux County

95-45-5A1. City of Sioux Center. Drilled unused artesian well in Dakota sandstone, diameter 5 inches, depth 456 feet. Land-surface datum is about 1,454 feet above msl. Highest water level 266.94 below lsd, Sept. 8, 1945; lowest 269.09 below lsd, July 14, 1948. Records available: 1939-45, 1948-49. No measurement made in 1951.

Story County

83-24-2Q1. City of Ames. Drilled unused artesian well in glacial sand and gravel, diameter 20 inches, depth 110 feet. Land-surface datum is about 925 feet above msl. Water levels affected by nearby pumping well. Highest water level 39.84 below lsd, June 3, 1951; lowest 59.30 below lsd, June 1, 1948. Records available: 1947-51.

## Daily highest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	51.74	51.09	.....	45.60	47.06	46.10	52.97	54.07	.....	48.26	.....
2	.....	51.80	50.90	.....	44.29	43.86	46.40	47.85	48.42	54.21	48.33	.....
3	.....	51.76	50.82	46.13	44.30	39.84	47.90	47.90	48.52	49.10	53.85	.....
4	.....	51.64	50.65	46.25	44.35	40.16	45.12	48.13	48.02	48.77	48.11	.....
5	.....	51.51	50.59	46.36	44.57	40.93	44.63	48.02	48.30	48.59	48.46	.....
6	.....	51.67	50.68	46.68	44.77	42.08	50.22	47.92	48.39	48.53	48.56	.....
7	.....	51.72	50.63	46.05	44.87	41.55	44.84	50.80	47.82	48.32	48.36	.....
8	.....	51.77	50.47	45.98	45.64	41.90	45.65	48.85	.....	48.12	48.41	.....
9	.....	51.78	50.51	46.03	45.73	41.19	45.40	48.52	.....	53.80	48.52	.....
10	.....	51.81	50.41	46.32	45.63	42.35	45.96	49.28	.....	48.26	48.46	.....
11	51.33	51.79	50.43	46.38	49.25	42.56	45.85	48.74	.....	48.73	48.46	.....
12	51.51	51.72	.....	45.64	46.01	43.55	46.03	53.96	.....	53.80	48.16	.....
13	51.38	51.77	.....	45.97	46.03	44.35	45.92	50.08	.....	48.43	48.33	.....
14	51.31	51.95	.....	46.19	45.91	49.71	46.17	48.57	.....	48.96	48.38	.....
15	51.24	51.78	.....	46.02	46.27	44.79	46.60	48.47	.....	48.23	48.44	.....
16	51.37	51.79	.....	46.14	46.51	44.52	46.47	48.12	.....	53.91	48.36	.....
17	51.35	51.99	.....	46.38	46.39	44.21	52.07	48.28	.....	49.37	48.36	.....
18	51.40	51.80	.....	46.73	52.09	44.68	46.64	48.65	.....	48.73	48.20	.....
19	51.51	51.44	.....	46.94	46.86	50.56	47.18	48.33	.....	48.80	48.22	.....
20	51.50	51.57	.....	46.88	46.63	44.56	46.66	48.53	.....	48.68	.....	.....
21	51.32	51.48	.....	46.85	46.73	45.08	52.39	48.13	.....	48.56	.....	.....
22	51.17	51.42	.....	46.76	46.86	44.89	46.69	48.17	.....	48.24	.....	.....
23	51.44	51.48	.....	46.63	47.13	45.61	46.98	48.50	.....	48.28	.....	.....
24	51.67	51.35	.....	46.65	52.52	45.49	52.34	48.37	.....	48.33	.....	.....
25	51.55	51.40	.....	46.31	47.03	45.58	47.70	48.30	.....	48.28	.....	.....
26	51.65	50.99	.....	45.93	47.71	46.30	52.45	48.27	.....	48.32	.....	.....
27	51.74	51.03	.....	45.64	47.24	46.27	47.48	48.38	.....	48.13	.....	.....
28	51.55	51.05	.....	46.18	47.38	46.57	52.68	48.22	.....	48.15	.....	.....
29	51.46	.....	.....	45.88	52.97	46.08	47.59	53.74	.....	48.04	.....	.....
30	51.62	.....	.....	45.69	47.80	45.98	47.66	48.56	.....	48.26	.....	.....
31	51.57	.....	.....	.....	53.01	52.15	53.78	48.51	.....	.....	.....	.....

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	56.95	56.27	.....	51.35	52.70	51.80	54.03	54.58	.....	54.04	.....
2	.....	56.96	56.20	51.57	49.82	50.61	52.32	54.10	54.15	54.72	54.07	.....
3	.....	56.98	56.16	51.58	49.98	45.98	51.16	53.63	53.93	54.30	54.17	.....
4	.....	56.99	56.19	51.65	49.96	46.45	50.98	53.70	54.01	54.15	54.15	.....
5	.....	56.96	56.07	51.73	50.19	46.86	53.97	53.80	53.88	53.75	54.06	.....
6	.....	57.08	55.92	51.97	50.40	47.24	54.07	53.55	53.92	53.70	54.09	.....
7	.....	57.09	55.89	51.53	50.69	47.66	51.08	57.38	53.97	53.63	54.11	.....
8	.....	57.09	55.90	51.53	51.00	47.40	50.93	54.10	.....	53.65	54.08	.....
9	.....	57.11	55.90	51.72	51.21	48.00	51.21	54.10	.....	53.97	54.09	.....
10	56.62	57.13	55.89	51.94	51.29	48.34	51.46	54.50	.....	53.81	54.12	.....
11	56.66	57.10	55.83	51.96	51.33	48.89	51.21	54.27	.....	53.80	54.15	.....
12	56.68	57.08	.....	51.61	51.38	52.36	51.44	54.60	.....	54.22	53.97	.....
13	56.71	57.10	.....	51.63	51.58	50.05	51.64	54.35	.....	53.94	53.97	.....
14	56.72	57.27	.....	51.52	51.60	53.36	51.92	54.43	.....	54.13	54.04	.....
15	56.70	57.10	.....	51.63	51.83	50.28	52.23	54.38	.....	53.91	54.13	.....
16	56.76	57.14	.....	51.80	51.89	50.39	52.47	54.11	.....	54.13	54.15	.....
17	56.72	57.14	.....	51.93	54.45	50.69	52.74	53.92	.....	54.10	54.18	.....
18	56.74	57.11	.....	52.15	52.64	51.10	52.92	54.02	.....	54.08	54.13	.....
19	56.91	56.89	.....	52.34	52.50	51.14	52.62	54.17	.....	54.10	54.05	.....
20	56.92	56.83	.....	52.43	52.45	50.98	52.73	54.12	.....	54.15	.....	.....

83-24-2Q1--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	56.82	56.81	.....	52.44	52.33	50.56	53.23	54.02	.....	54.12	.....	.....
22	56.73	56.74	.....	52.48	52.42	50.58	52.98	53.90	.....	53.96	.....	.....
23	56.78	56.71	.....	52.25	52.66	50.87	52.80	54.10	.....	54.00	.....	.....
24	56.82	56.66	.....	52.28	53.01	50.97	52.97	54.07	.....	53.96	.....	.....
25	56.82	56.62	.....	54.67	52.86	51.21	53.18	53.94	.....	53.93	.....	.....
26	56.83	56.35	.....	51.63	52.88	54.66	53.42	54.11	.....	53.93	.....	.....
27	56.86	56.37	.....	51.24	52.84	54.46	53.30	54.32	.....	53.99	.....	.....
28	56.88	56.30	.....	51.34	53.16	51.81	51.47	54.55	.....	53.90	.....	.....
29	56.85	.....	.....	51.42	53.68	51.82	53.88	54.71	.....	53.87	.....	.....
30	56.93	.....	.....	51.46	55.45	51.77	53.62	54.50	.....	54.03	.....	.....
31	56.91	.....	.....	.....	53.69	53.45	54.56	.....	53.94	.....	.....	.....

83-24-4Q1. Iowa State College. Ames. Drilled unused artesian well in Jordan sandstone, diameter 12 to 5 inches, depth 2,250 feet, cased to 1,970. Highest water level 39.19 below lsd, May 13, 1942; lowest 46.33 below lsd, Sept. 18, 1950. Records available: 1939-51. Apr. 2, 43.05; June 25, 42.07; Oct. 1, 42.34.

83-24-4R1. Iowa State College. Ames. Dug unused water-table well in glacial drift, diameter 36 inches, depth 33 feet, cribbed with brick. Highest water level 6.31 below lsd, Apr. 25, 1947; lowest 25.34 below lsd, Apr. 2, 1951. Records available: 1942-51. Apr. 2, 25.34; June 25, 17.85; Oct. 1, 17.06.

83-24-20J1. Agricultural Engineering Experiment Station. Dug unused water-table well in glacial drift, diameter 36 inches, depth 38 feet, cribbed with brick. Highest water level 5.90 below lsd, May 31, 1944; lowest 26.09 below lsd, July 14, 1939. Records available: 1939-51. Apr. 2, 8.24; June 25, 6.96; Oct. 1, 8.00.

Tama County

82-13-13R1. City of Belle Plaine. Drilled observation water-table well in alluvial sand and gravel, diameter 8 inches, depth 29 feet. Highest water level 4.00 below lsd, Apr. 25, 1947; lowest 13.44 below lsd, July 13, 1945. Records available: 1945-49. No measurement made in 1951.

Van Buren County

69-10-36F1. City of Keosauqua. Drilled observation artesian well in limestone of Mississippian age, diameter 10 to 8 inches, depth 485 feet, cased to 178. Land-surface datum is 582 feet above msl. Highest water level 19.80 below lsd, June 19, 1950; lowest 22.70 below lsd, Mar. 16, 1951. Records available: 1949-51. Mar. 16, 22.70; June 19, 20.48; Sept. 14, 20.16.

Wapello County

72-14-25C1. City of Ottumwa. Driven observation water-table well in sand and gravel, diameter 1½ inches, depth 17 feet, screen 15-17. Highest water level 0.08 above lsd, June 6, 1951; lowest 3.46 below lsd, Sept. 14, 1951. Records available: 1951. June 6, +0.08; June 16, -0.59; June 20, -0.85; Sept. 14, -3.46.

72-14-24Q1. Iowa Geol. Survey. Driven observation water-table well in sand and gravel, diameter 1½ inches, depth 23 feet, screen 21-23. Highest water level 4.03 below lsd, June 6, 1951; lowest 6.07 below lsd, Sept. 14, 1951. Records available: 1951. June 6, 4.03; June 16, 4.50; June 20, 4.76; Sept. 14, 6.07.

Warren County

76-25-8Q1. Iowa State College. Dug domestic water-table well in glacial drift, diameter 36 inches, depth 30 feet, cribbed with rock. Highest water level 3.95 below lsd, Jan. 4, 1946; lowest 27.47 below lsd, Oct. 5, 1950. Records available: 1940-51. Mar. 28, 10.99; June 21, 5.84; Sept. 13, 26.26.

Webster County

90-30-26A1. County of Webster. Clare. Drilled domestic water-table well in glacial sand, depth 37 feet, lined with tile. Highest water level 4.91 below lsd, June 27, 1951; lowest 26.19 below lsd, Dec. 29, 1945. Records available: 1942-51. Apr. 4, 16.56; June 27, 4.91; Oct. 3, 7.34.

90-28-1B1. Ed Askland. Drilled stock water-table well in glacial drift, diameter 18 inches, depth 43 feet, lined with tile. Land-surface datum is about 1,155 feet above msl. Highest water level 2.64 below lsd, June 28, 1951; lowest 15.70 below lsd, Dec. 22, 1949. Records available: 1942-43, 1945-51. Apr. 5, 7.54; June 28, 2.64; Oct. 4, 3.49.

90-28-8Q1. S. E. Hovey. Drilled domestic water-table well in glacial drift, depth 32 feet, lined with tile. Land-surface datum is about 1,130 feet above msl. Highest water level 4.66 below lsd, June 28, 1951; lowest 11.02 below lsd, Oct. 11, 1948. Records available: 1942-51. Apr. 15, 6.82; June 28, 4.66; Oct. 4, 6.71.

90-27-31N1. C. S. Knudson. Drilled unused water-table well in glacial drift, diameter 15 inches, depth 53 feet, lined with tile. Land-surface datum is about 1,125 feet above msl. Highest water level 4.08 below lsd, June 28, 1951; lowest 13.90 below lsd, Dec. 17, 1948. Records available: 1942-43, 1948-51. Apr. 5, 9.12; June 28, 4.08; Oct. 4, 5.02.

89-30-23R. Johnson Township Consolidated School. Barnum. Drilled unused artesian well in sandstone, diameter 4 inches, depth 203 feet, casing reported to be perforated at bottom. Highest water level 30.86 below lsd, July 2, 1945; lowest 35.36 below lsd, June 22, 1950. Records available: 1942-45, 1947-51. Apr. 4, 35.30; June 27, 34.41; Oct. 3, 33.40.

88-29-11C1. C. F. Madson. Drilled domestic water-table well in glacial drift, diameter 14 inches, depth 55 feet, lined with tile. Land-surface datum is about 1,130 feet above msl. Highest water level 3.65 below lsd, Apr. 4, 1951; lowest 13.02 below lsd, Oct. 11, 1948. Records available: 1942-51. Apr. 4, 3.65; June 27, 4.06; Oct. 3, 5.79.

87-30-30R1. School District No. 9. Drilled unused water-table well in glacial drift, diameter 14 inches, depth 42 feet, lined with tile. Highest water level 2.47 below lsd, Apr. 4, 1951; lowest 11.01 below lsd, Dec. 19, 1947. Records available: 1942-51. Apr. 4, 2.47; June 27, 5.52; Oct. 3, 6.78.

87-28-29N1. Grant Spangler. Drilled unused water-table well in glacial drift, diameter 12 inches, depth 42 feet, lined with tile. Land-surface datum is about 1,165 feet above msl. Highest water level 1.04 below lsd, June 13, 1947; lowest 11.39 below lsd, Mar. 2, 1950. Records available: 1942-51.

#### Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.59	7.90	6.96	3.96	1.10	2.96	....	5.17	4.50	5.22	4.68	4.66
2	7.63	7.85	6.91	3.91	1.59	1.98	....	5.16	4.49	5.22	4.68	4.67
3	7.60	7.82	6.65	3.74	1.90	2.40	....	5.10	4.54	5.25	4.53	4.63
4	7.70	7.90	6.64	3.66	2.11	2.64	....	5.07	4.57	5.26	4.66	4.74
5	7.76	7.83	6.42	3.60	2.27	2.76	....	5.01	4.57	5.34	4.68	4.71
6	7.88	7.80	6.25	3.55	....	2.84	....	5.00	4.64	5.30	4.66	4.63
7	7.85	7.95	6.12	2.71	....	2.88	....	5.07	4.76	5.31	4.68	4.78
8	7.81	7.87	6.06	2.76	....	2.12	....	5.17	4.80	5.31	4.63	4.89
9	7.74	7.92	6.03	2.77	....	2.46	....	5.30	4.79	5.21	4.67	4.89
10	7.86	7.80	5.92	2.85	2.09	2.73	....	5.40	4.70	5.23	4.69	4.80
11	h7.88	7.70	5.92	2.67	2.23	2.82	h3.71	5.49	4.65	5.20	4.67	4.80
12	7.90	7.78	5.91	2.28	....	3.00	3.71	5.56	4.15	5.22	4.55	4.74
13	7.89	7.82	5.79	2.22	....	3.15	3.63	....	4.07	5.24	4.48	4.85
14	7.91	7.84	5.80	2.43	....	3.23	3.58	5.50	4.53	5.23	4.53	4.84
15	7.92	7.78	5.86	2.67	....	3.20	3.70	5.33	4.60	5.25	4.62	4.92
16	7.95	7.69	5.83	2.80	....	....	3.82	5.23	4.57	5.26	4.66	4.91
17	7.97	7.67	5.84	2.87	....	3.36	3.90	5.14	4.60	5.24	4.71	4.83
18	7.98	7.63	5.86	3.00	....	3.40	3.99	5.23	4.69	5.09	4.66	4.90
19	7.96	7.59	5.89	3.13	....	3.40	4.03	5.13	4.75	4.87	4.67	4.81
20	8.06	7.59	5.90	3.15	....	3.33	h4.08	4.99	4.79	4.81	4.61	4.83
21	8.22	7.59	5.88	2.01	....	....	4.18	4.87	4.92	4.76	4.58	4.88
22	7.95	7.59	5.76	2.12	h3.47	....	4.30	4.82	4.90	4.71	4.67	4.92
23	7.95	7.59	5.83	2.33	....	....	4.41	4.79	4.97	4.63	4.77	5.02
24	8.02	7.52	5.91	2.30	....	3.48	4.49	4.77	5.01	4.57	4.82	5.03
25	8.04	7.37	5.78	1.41	....	3.53	4.56	4.72	5.00	4.53	4.73	5.01
26	7.90	7.29	5.54	1.97	....	3.53	4.66	4.74	4.88	4.58	4.83	5.12
27	7.92	7.28	5.18	1.98	....	h3.49	4.74	4.76	5.13	4.58	4.79	5.09
28	8.00	7.00	4.64	2.20	....	3.62	4.83	4.68	5.22	4.55	4.82	4.95
29	8.04	7.00	4.16	1.74	....	3.69	4.91	4.55	5.18	4.53	4.80	4.95
30	8.02	7.00	4.00	1.51	h3.80	h3.79	4.96	4.45	5.18	4.55	4.74	5.03
31	7.95	7.00	3.98	3.74	....	....	5.07	4.48	4.67	4.67	4.98	4.98

h Tape measurement.

87-27-18M1. J. B. Marsh. Drilled stock artesian well in sandstone of Pennsylvanian age, diameter 6 to 3 inches, depth 356 feet, cased 0-356, finished open end. Land-surface datum is about 1,110 feet above msl. Highest water level 122.05 below lsd, Dec. 16, 1944; lowest 137.66 below lsd, Mar. 31, 1949. Records available: 1942-51. Mar. 4, 130.62; June 27, 128.90.

86-30-5C1. E. C. Monson. Drilled stock artesian well in sandstone of Pennsylvanian age, diameter 6 inches, reported depth 225 feet, cased to 214. Highest water level 55.67 below lsd, Apr. 28, 1946; lowest 62.03 below lsd, Dec. 22, 1949. Records available: 1942-51. Mar. 4, 60.55.

86-29-14A1. F. E. Castenson. Drilled unused water-table well in glacial sand, diameter 12 inches, depth 39 feet, lined with tile. Land-surface datum is about 1,150 feet above msl. Highest water level 3.02 below lsd, June 22, 1950; lowest 9.73 below lsd, Oct. 11, 1948. Records available: 1942-51. Apr. 4, 4.46; June 27, 3.93; Oct. 3, 6.95.

86-28-14H1. Town of Dayton. Drilled municipal artesian well in limestone of Devonian age, diameter 13 to 8 inches, depth 1,240 feet, cased 0-505 and 770-966. Land-surface datum is about 1,120 feet above msl. Highest water level 69.93 below lsd, Nov. 17, 1942; lowest 147.40 below lsd, Apr. 28, Oct. 9, 1946. Records available: 1942-48. No measurement made in 1951.

86-27-4D1. A. B. Davis. Drilled domestic and stock artesian well in sandstone of Pennsylvanian age, diameter 5 inches, depth 225 feet, reported cased to 200. Land-surface datum is about 1,105 feet above msl. Highest water level 104.52 below lsd, Apr. 28, 1946; lowest 109.29 below lsd, Mar. 31, 1949. Records available: 1942-51. Apr. 4, 106.20; June 27, 105.71; Oct. 3, 105.83.

#### Woodbury County

89-48-23B1. Sioux City. Riverside Blvd. and Hornick Ave. Drilled unused artesian well in Dakota sandstone, diameter 12 to 10 inches, depth 260 feet, cased 0-227. Land-surface datum is about 1,102 feet above msl. Highest water level 11.37 below lsd, June 20, 1951; lowest 16.28 below lsd, Feb. 1, 2, 1950. Records available: 1939-44, 1949-51.

Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1	.....	.....	.....	.....	.....	13.90	12.03	12.41	13.00	13.17	13.74	14.29	
2	.....	.....	.....	.....	.....	13.78	11.90	12.40	13.00	13.21	13.75	14.31	
3	.....	15.67	.....	13.77	.....	13.63	11.55	12.37	13.05	13.22	13.75	14.42	
4	.....	.....	.....	13.73	.....	13.50	11.64	12.35	13.06	13.25	13.80	14.38	
5	.....	.....	15.40	.....	.....	13.37	11.74	12.36	13.10	13.30	13.92	14.40	
6	.....	.....	.....	.....	.....	13.34	11.62	12.28	13.01	13.29	13.87	14.10	
7	.....	.....	.....	.....	.....	13.36	11.67	12.25	.....	13.31	13.90	14.39	
8	.....	.....	.....	.....	.....	13.40	12.03	12.19	.....	13.33	13.83	14.36	
9	.....	.....	.....	13.97	.....	13.31	12.25	12.16	13.33	13.35	13.92	14.36	
10	.....	.....	.....	.....	.....	13.25	12.28	12.13	13.47	13.38	13.91	14.40	
11	15.22	.....	.....	.....	.....	13.10	12.26	12.10	13.48	13.41	13.81	14.44	
12	15.22	.....	.....	.....	.....	13.20	12.35	12.16	13.82	13.47	13.80	14.56	
13	.....	.....	.....	.....	.....	13.32	12.39	12.24	13.82	13.45	13.84	14.62	
14	.....	.....	.....	.....	.....	13.42	12.41	12.65	13.79	13.48	13.90	14.77	
15	.....	.....	.....	.....	.....	13.50	12.48	12.82	13.71	13.45	13.98	14.78	
16	15.19	.....	.....	.....	.....	13.60	12.67	12.76	13.67	13.57	14.01	14.66	
17	.....	.....	.....	.....	.....	13.71	12.77	12.81	13.57	13.57	14.00	14.62	
18	.....	.....	.....	.....	.....	12.11	12.87	12.78	13.46	13.62	13.97	14.67	
19	.....	.....	.....	.....	.....	11.89	13.06	12.73	13.36	13.54	14.02	14.55	
20	.....	15.70	.....	13.41	.....	11.37	13.00	12.95	13.28	13.45	13.97	14.68	
21	.....	.....	.....	.....	.....	11.48	13.00	12.93	13.16	13.50	14.06	14.71	
22	.....	.....	.....	.....	.....	11.80	13.00	13.02	13.17	13.55	14.07	14.75	
23	15.37	15.65	.....	13.77	13.62	12.05	12.92	13.09	13.10	13.55	14.08	14.79	
24	.....	.....	.....	.....	.....	13.64	12.23	12.86	13.03	13.08	13.49	14.13	14.79
25	15.40	.....	.....	.....	.....	13.74	12.32	12.74	13.07	12.95	13.55	14.12	14.86
26	.....	15.59	.....	.....	.....	13.80	12.25	12.70	13.12	13.02	13.59	14.20	14.92
27	.....	.....	.....	.....	.....	13.86	11.95	12.63	12.82	13.13	13.55	14.17	14.78
28	.....	.....	.....	.....	.....	13.88	11.90	12.61	12.69	13.17	13.58	14.20	14.77
29	.....	.....	.....	.....	.....	13.96	11.95	12.58	12.66	13.14	13.58	14.26	14.79
30	.....	.....	.....	.....	14.05	12.03	12.51	12.75	13.15	13.70	14.27	14.82	
31	.....	.....	.....	.....	13.98	.....	12.45	12.93	.....	13.72	.....	14.83	

89-47-22B2. Sioux City. 2600 Hawkeye Drive. Drilled unused artesian well in Dakota sandstone, diameter 26 to 16 inches, depth 343 feet, perforations 148-343. Land-surface datum is about 1,108 feet above msl. Water levels affected by pumping of nearby wells. Highest water level 16.11 below lsd, Sept. 24, 1951; lowest 29.40 below lsd, Aug. 27, 1949. Records available: 1949-51.

Daily highest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21.85	23.49	23.65	22.29	19.91	19.97	19.50	20.41	19.93	16.74	17.95	17.18
2	21.86	23.48	22.92	22.34	20.02	19.74	19.31	20.22	18.76	16.68	17.74	16.86
3	22.39	23.24	22.41	21.79	20.28	19.08	19.12	19.52	18.69	17.82	17.55	16.79
4	22.24	22.74	21.37	21.91	20.21	18.99	19.33	19.27	18.38	18.27	17.19	17.33
5	22.19	23.14	21.25	21.80	20.41	18.98	19.18	18.36	17.70	18.78	16.92	17.89
6	22.12	22.78	22.16	21.57	19.73	19.63	19.88	18.22	18.38	18.37	17.45	17.46
7	21.98	23.75	22.65	21.25	19.05	20.06	20.12	19.32	18.64	16.91	17.75	17.52
8	21.98	23.64	22.85	21.08	19.83	19.98	19.90	20.16	18.03	16.68	18.45	17.75
9	22.35	23.64	22.78	20.92	20.29	19.56	19.32	20.22	17.96	17.15	18.87	17.67
10	22.59	23.45	22.58	21.26	20.47	19.15	19.41	20.36	18.46	17.07	19.09	17.37
11	22.43	23.34	22.33	21.26	20.12	19.07	19.01	20.05	18.61	17.77	19.15	17.33
12	22.41	23.09	23.13	20.94	19.91	18.91	18.61	19.28	18.36	17.22	20.40	17.28
13	21.78	22.80	22.17	20.38	19.61	19.64	18.30	19.09	17.68	16.90	19.80	17.38
14	21.28	22.93	21.67	20.87	19.50	19.85	18.45	19.45	17.43	.....	19.65	17.40
15	21.28	22.71	22.40	20.44	19.94	19.89	18.42	19.42	17.41	16.87	19.35	17.55
16	21.82	22.52	22.50	20.41	20.10	19.94	18.39	19.32	17.01	17.94	18.93	17.33
17	21.99	22.07	22.61	20.66	20.45	18.89	19.79	19.38	17.04	18.15	18.87	17.00
18	22.02	21.85	22.75	21.40	20.53	18.81	19.88	19.15	17.19	18.23	18.98	17.12
19	22.97	22.06	22.42	20.70	20.04	19.45	19.88	19.02	17.52	17.47	19.95	16.88
20	22.40	22.31	22.64	20.38	19.60	20.66	19.70	18.50	16.93	17.03	19.70	16.98
21	21.70	22.20	21.92	19.78	19.57	20.28	20.29	18.99	16.94	16.35	19.32	17.03
22	21.62	22.36	22.47	20.12	19.99	20.92	20.54	18.99	16.32	16.33	17.55	17.00
23	22.85	22.39	22.69	20.04	19.48	21.09	19.77	19.24	16.14	17.00	17.55	17.19
24	22.86	23.31	22.97	20.02	19.79	19.87	20.60	18.74	16.11	17.40	18.23	17.55
25	22.77	22.57	22.32	20.59	19.89	19.60	19.95	18.73	16.80	17.50	17.77	17.29
26	22.57	22.25	21.74	20.68	19.72	19.61	20.47	18.84	16.68	17.80	17.43	17.36
27	21.62	23.30	21.17	20.51	18.98	20.22	21.12	18.21	17.93	17.79	17.44	17.03
28	21.47	23.21	21.97	20.11	18.92	21.04	21.18	18.74	18.04	17.05	17.63	16.74
29	22.00	22.31	19.82	19.77	20.91	19.82	18.83	17.09	16.23	17.32	16.94	16.94
30	22.45	22.34	19.75	19.69	20.89	19.61	18.80	16.75	17.10	17.22	17.06	17.06
31	23.12	22.32	19.32	19.32	20.86	19.43	17.79	17.79	17.00	17.45	17.03	17.03

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	22.64	23.62	23.83	22.40	20.51	20.74	20.92	21.15	20.12	17.17	18.14	17.75
2	22.66	23.59	23.81	22.39	20.88	20.41	19.60	20.92	20.13	17.82	18.17	17.22
3	22.68	23.54	23.11	22.30	20.93	20.19	20.13	20.24	19.48	18.30	18.00	17.65
4	22.63	23.66	22.41	22.05	21.07	19.65	20.19	19.95	18.91	18.78	18.10	17.89
5	22.80	23.66	22.16	21.98	21.07	19.86	19.88	19.70	18.38	19.00	17.45	18.35
6	22.80	23.90	22.68	21.82	20.53	20.53	20.19	19.32	18.81	18.85	17.75	18.35
7	22.95	24.01	22.85	22.04	20.49	20.74	20.24	20.33	18.96	18.37	18.45	17.90
8	22.75	23.96	23.02	22.09	20.69	20.64	20.28	20.78	18.64	17.20	18.87	17.90
9	23.00	23.99	23.03	21.88	20.97	20.27	20.43	20.82	19.04	17.48	19.13	17.82
10	23.10	23.66	22.84	21.95	21.13	19.56	20.44	20.84	19.18	18.25	19.24	17.67
11	22.63	23.49	23.13	21.81	20.95	19.61	19.47	20.78	19.03	18.28	20.55	17.48
12	22.50	23.66	23.50	21.44	21.00	19.64	19.28	20.52	18.74	17.85	21.16	17.60
13	22.48	23.09	23.50	20.94	19.91	19.89	18.83	19.88	18.36	17.54	20.40	17.62
14	21.78	23.07	22.41	21.16	20.76	20.00	18.92	20.13	18.04	16.92	20.16	17.65
15	22.01	22.92	22.63	20.87	20.89	20.01	18.95	20.02	18.08	18.14	20.17	17.70
16	22.04	22.70	22.65	21.44	21.02	20.10	20.21	20.01	17.43	18.66	19.35	17.59
17	22.12	22.62	22.82	21.40	21.25	20.08	20.32	20.24	17.46	18.82	19.00	17.36
18	23.03	22.32	22.86	21.74	21.16	19.76	20.51	20.30	18.27	18.89	20.25	17.28
19	23.47	22.58	22.85	21.63	21.18	20.68	20.59	19.69	18.34	18.30	20.68	17.14
20	22.97	22.67	22.87	20.76	20.05	21.00	20.29	19.31	17.58	17.67	19.95	17.05
21	22.40	22.72	22.57	20.38	20.82	20.99	20.66	19.56	17.64	17.04	19.70	17.21
22	22.84	22.81	22.75	20.37	20.68	21.14	20.75	19.63	16.94	17.10	19.32	17.21
23	23.12	23.35	23.12	20.40	20.11	21.19	20.66	19.74	16.34	17.40	18.54	18.41
24	23.01	23.43	23.15	21.07	20.52	21.14	21.14	19.44	16.99	17.53	18.96	18.43
25	22.96	23.43	22.97	21.50	20.29	19.87	20.90	19.57	17.16	17.80	18.95	17.55
26	22.82	23.30	22.32	21.39	20.19	20.26	21.26	19.64	18.08	18.04	17.80	17.55
27	22.91	23.53	21.97	21.35	19.72	21.70	21.66	18.84	18.61	18.01	18.73	17.55
28	22.28	23.65	22.35	21.08	19.78	21.39	21.91	18.91	18.63	17.90	18.75	17.05
29	22.47	22.47	22.42	20.11	20.13	21.06	21.18	18.98	18.43	17.14	17.91	17.20
30	23.12	22.44	20.43	20.26	20.03	21.36	19.43	17.09	17.90	17.82	17.25	17.25
31	23.57	22.38	20.10	21.57	19.93	18.00	18.00	17.45	17.45	17.45	17.45	17.45

## KANSAS

By Betty J. Mason, LaVonne Godwin, and W. W. Wilson

### Scope of Water-Level Program

The observation-well program in Kansas was continued in 1951 in cooperation with the State Geological Survey, the Division of Water Resources of the State Board of Agriculture, and the Division of Sanitation of the State Board of Health. The city of Wichita cooperated in Harvey, McPherson, and Sedgewick Counties. Measurements made in 89 of the Missouri Basin wells, in cooperation with the U. S. Bureau of Reclamation are included in this report. Measurements were made in 574 wells, 11 of which were equipped with recording gages. See figs. 8-11.

Two reports in regard to ground-water investigations were published by the Kansas Geological Survey: Bulletin 93, Geology and ground-water resources of Lane County, by G. C. Prescott; and vol. 11, pt. 3, Ground-water resources of Chase County, by H. G. O'Connor.

### Precipitation

1951 was the wettest year since beginning of State-wide weather records in 1887. It was the 8th consecutive year of above-normal precipitation. More than 60 inches of precipitation was recorded at 14 stations. The average precipitation, 41.57 inches, was 14.98 inches above normal. Highest river stages ever recorded occurred on the Kansas River and most of its tributaries. The upper Arkansas and a number of smaller streams in western Kansas also experienced unprecedented flooding. Heavy washing rains caused much soil erosion. In April all the State, except a few southwestern stations, received more than an inch of moisture with several central stations reporting 4 to 6 inches, yet the month averaged slightly below normal, the first month with below-normal precipitation. June was the wettest month in Kansas history. Rivers in the north and east rose to disastrous stages for the most prolonged period of record. The wet weather of May and June culminated in July in a deluge over north-central and eastern Kansas. Monthly total of 15 to 20 inches fell in the headwaters of the Kansas, Neosho, and Marais des Cygnes river basins.

### Well-Numbering System

Wells are either numbered serially within counties, or in accordance with the Bureau of Land Management system of land subdivision. The first digit of a well number indicates the township, the second the range, and the third the section in which the well is situated. The first letter denotes the quarter section (160-acre tract), the second the quarter-quarter section (40-acre tract), and the third the quarter-quarter-quarter section (10-acre tract). The letters are assigned in a counterclockwise direction, beginning in the northeast quarter. Thus, the number 24-18-33baa indicates that the well is in the NE<sub>4</sub><sup>1</sup>NE<sub>4</sub><sup>1</sup>NW<sub>4</sub><sup>1</sup> sec. 33, T. 24 S., R. 18 E.

### Well Descriptions and Water-Level Measurements

(Water levels are in feet below land-surface datum unless otherwise indicated.)

The geologic nomenclature of this section of the report follows the usage of the State Geological Survey of Kansas, and does not necessarily coincide with the official nomenclature used by the U. S. Geological Survey.

### Allen County

24-18-33baa. Arnold Estate. Dug unused water-table well in Chanute shale, diameter 5 feet, depth 19 feet, cribbed with rock. Highest water level 8.87 below lsd, Mar. 1, 1949; lowest 13.18 below lsd, June 7, 1948. Records available: 1948-51. Apr. 18, 11.14; Aug. 2, 8.93; Sept. 29, 9.35; Nov. 30, 10.31.

24-21-33dcd. J. F. Harris. Drilled unused water-table well, diameter 12 to 10 inches. Highest water level 37.35 below lsd, Mar. 1, 1949; lowest 41.35 below lsd, Apr. 18, 1951. Records available: 1948-51. Apr. 18, 41.35; Aug. 2, 40.52; Sept. 28, 39.04; Nov. 30, 39.20.

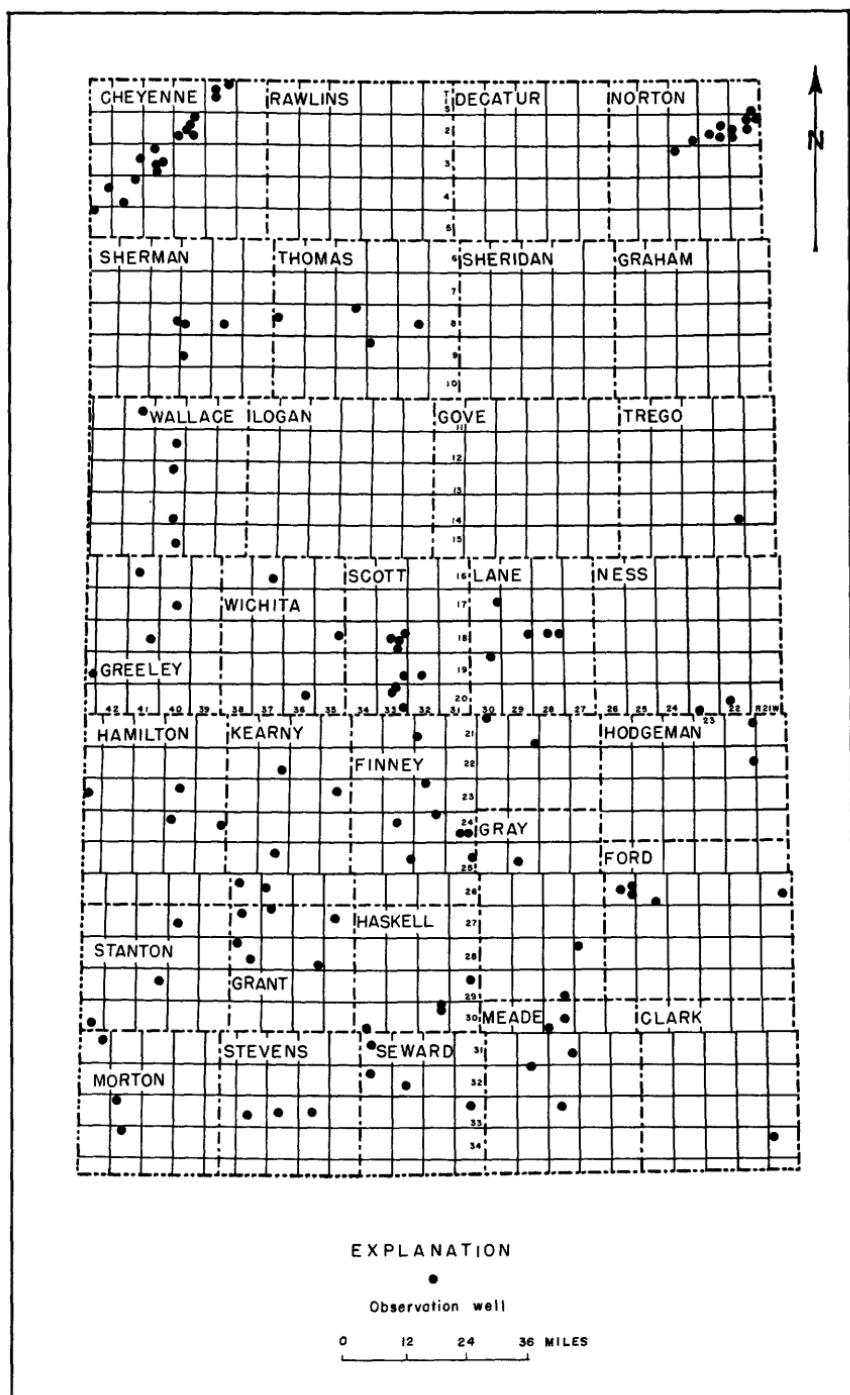
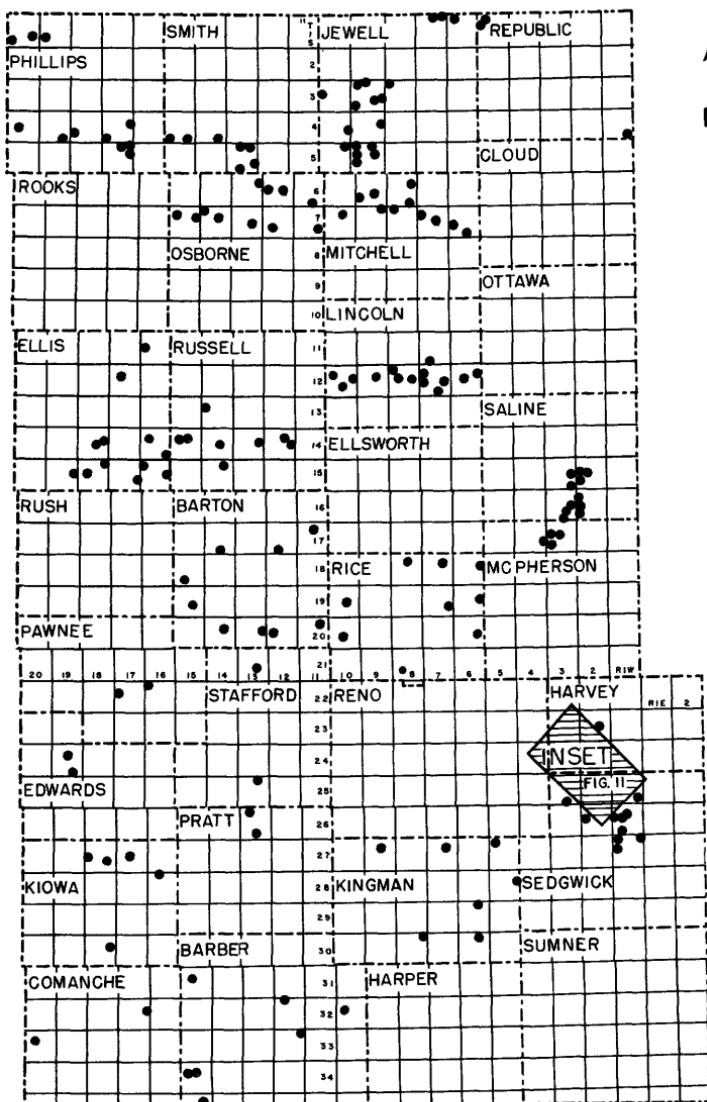


Figure 8. --Location of observation wells in western Kansas, 1951.



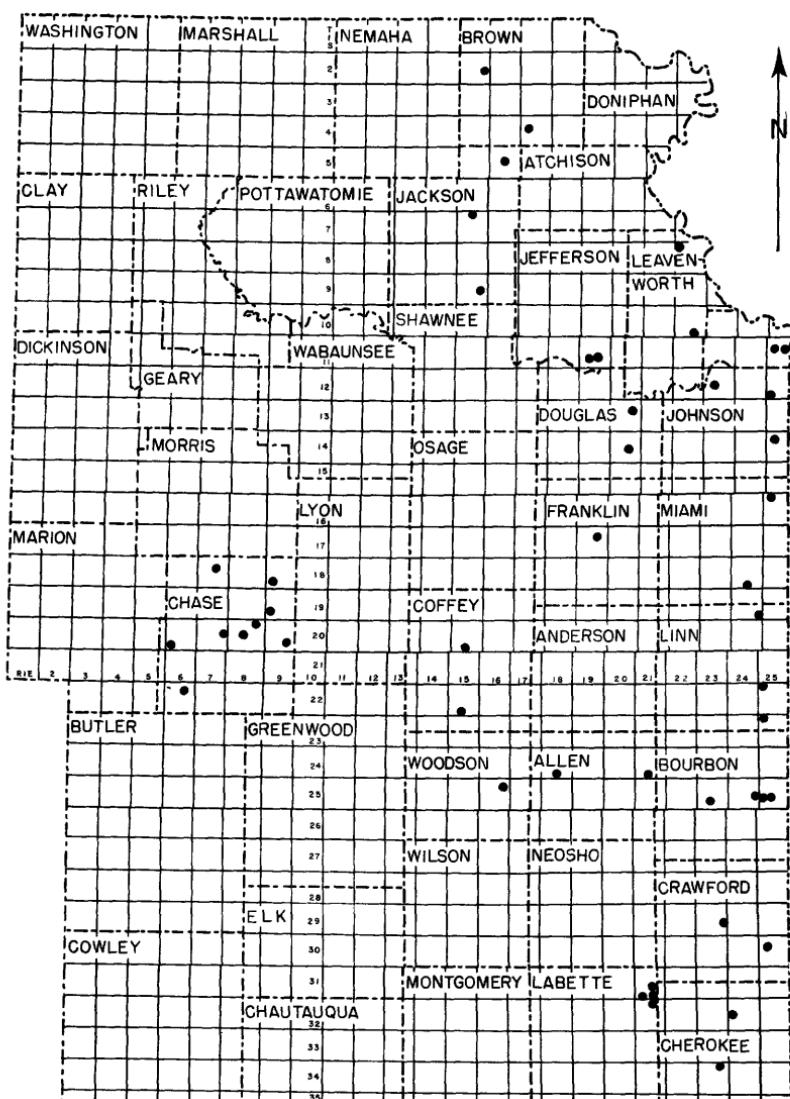
## EXPLANATION

•

Observation well

0      12      24      36 MILES

Figure 9.--Location of observation wells in central Kansas, 1951.



## EXPLANATION

• Observation well

0 12 24 36 MILES

Figure 10. -- Location of observation wells in eastern Kansas, 1951.

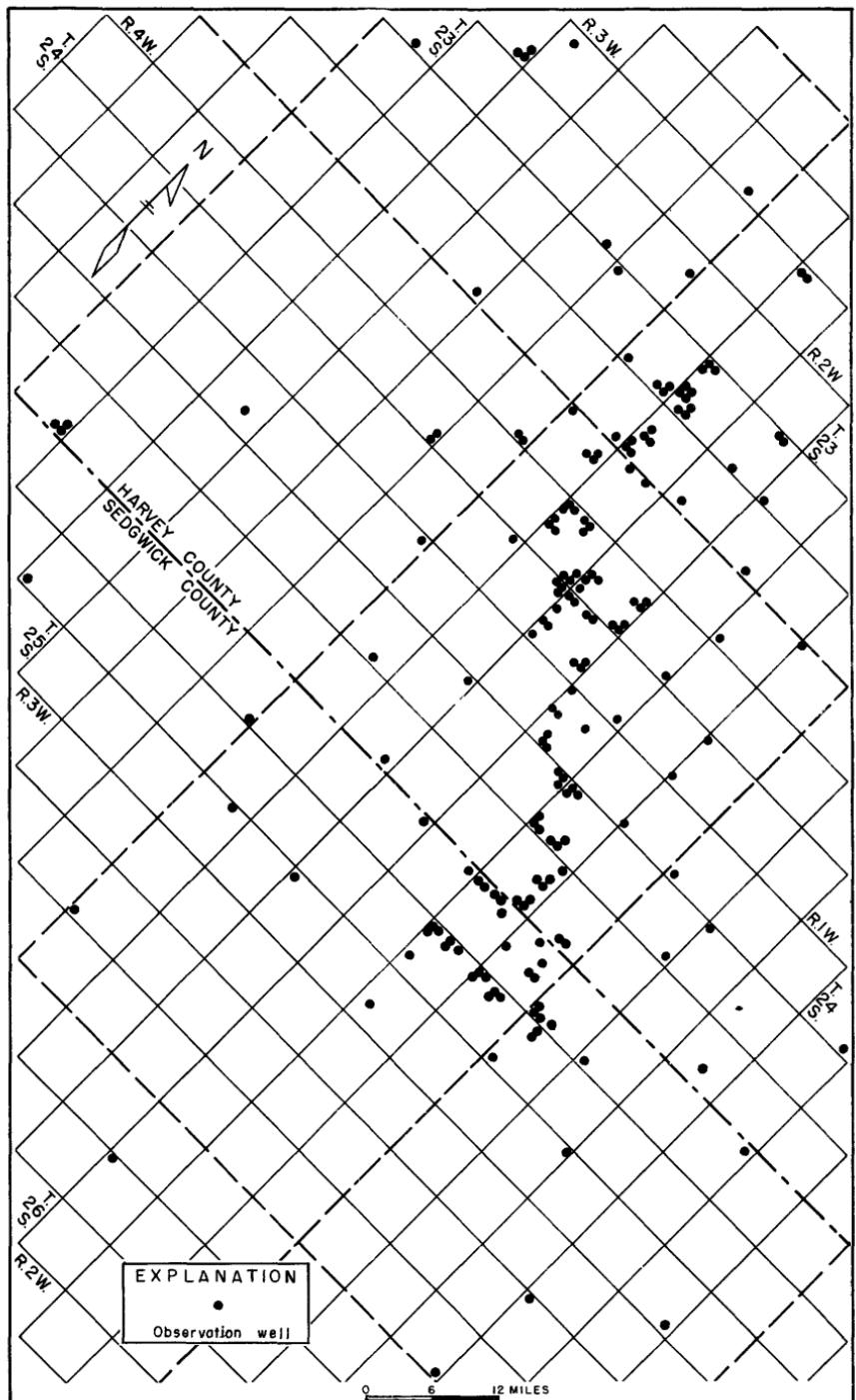


Figure 11.--Location of observation wells in parts of Harvey and Sedgwick Counties, Kans., 1951.

Atchison County

5-18-3dd. Lee Savage. Dug unused water-table well in glacial deposits, diameter 36 inches, depth 10 feet, cribbed with rock. Highest water level 0.39 below lsd, Sept. 27, 1951; lowest 2.57 below lsd, Nov. 27, 1948 and Feb. 9, 1949. Records available: 1948-51. Apr. 17, 0.82; Aug. 1, 0.72; Sept. 27, 0.39; Nov. 27, 0.80.

6-21-32d. L. A. Walker. Dug unused water-table well in glacial deposits, diameter 5 feet, depth 13 feet, cribbed with rock. Highest water level 3.19 below lsd, Apr. 15, 1949; lowest 8.76 below lsd, Nov. 27, 1948. Records available: 1948-51. Apr. 17, 3.99; Aug. 1, 4.52; Sept. 27, 4.76; Nov. 27, 4.94.

Barber County

1. D. S. Shaw.  $SE_4^1NW_4^1$  sec. 19, T. 31 S., R. 15 W. Drilled unused water-table well in deposits of Permian age, diameter 8 to 6 inches, depth 97 feet. Highest water level 56.40 below lsd, June 20, 1951; lowest 82.99 below lsd, Oct. 17, 1940. Records available: 1940-51. Mar. 19, 57.25; June 20, 56.40; Sept. 19, 65.70; Dec. 19, 63.25.

4. Madge Evans.  $SW_4^1SE_4^1$  sec. 4, T. 32 S., R. 12 W. Drilled irrigation water-table well in alluvium, diameter 16 inches, depth 42 feet. Highest water level 12.50 below lsd, June 22, 1949; lowest 16.30 below lsd, Aug. 20, 1943. Records available: 1940-51. Mar. 19, 14.50; Sept. 19, 13.86; Dec. 19, 13.69.

5. R. Kenney.  $NE_4^1NW_4^1$  sec. 1, T. 33 S., R. 12 W. Dug stock water-table well in alluvium, diameter 24 inches, depth 35 feet, cribbed with stone. Highest water level 17.23 below lsd, Dec. 19, 1951; lowest 30.15 below lsd, Sept. 24, 1941. Records available: 1940-51. Apr. 19, 19.16; June 20, 18.10; Sept. 19, 17.40; Dec. 19, 17.23.

8. P. Brack.  $SE_4^1NE_4^1$  sec. 17, T. 34 S., R. 15 W. Dug unused water-table well in alluvium, diameter 36 inches, depth 22 feet, cribbed with brick. Highest water level 8.87 below lsd, Nov. 21, 1941; lowest 17.98 below lsd, Mar. 21, 1941. Records available: 1940-51. Mar. 19, 17.00; June 20, 10.81; Sept. 19, 14.09; Dec. 19, 15.06.

9. V. D. Wells.  $SE_4^1SE_4^1$  sec. 18, T. 34 S., R. 15 W. Driven unused water-table well in alluvium, diameter 1 inch, depth 11 feet. Highest water level 1.07 below lsd, June 20, 1951; lowest 4.54 below lsd, Aug. 21, 1943. Records available: 1940-51. Mar. 19, 1.72; June 20, 1.07; Dec. 19, 1.70.

10. G. H. Davis.  $NW_4^1SW_4^1$  sec. 11, T. 35 S., R. 15 W. Drilled unused water-table well in deposits of Permian age, diameter 5 inches, depth 152 feet. Highest water level 102.20 below lsd, Mar. 15, 1945; lowest 107.72 below lsd, Sept. 25, 1948. Records available: 1940-51. Mar. 19, 105.46; June 20, 105.29; Sept. 19, 105.04; Dec. 19, 105.17.

13. J. A. Hrencher.  $SW_4^1SE_4^1$  sec. 17, T. 32 S., R. 10 W. Dug unused water-table well in deposits of Pleistocene age, diameter 4 feet, depth 22 feet, concrete casing. Highest water level 1.98 below lsd, Sept. 19, 1951; lowest 16.99 below lsd, Oct. 22, 1940. Records available: 1940-51. Mar. 19, 10.29; June 20, 5.08; Sept. 19, 1.98; Dec. 19, 4.61.

Barton County

1. F. Panning.  $SE_4^1SE_4^1$  sec. 3, T. 20 S., R. 11 W. Driven observation water-table well in alluvium, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Highest water level 0.3 above lsd, June 26, 1951; lowest 5.49 below lsd, Aug. 21, 1946. Records available: 1942-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	-3.86	Apr. 14	-3.08	July 11	-0.12	Oct. 23	-4.06
Feb. 12	3.92	16	-3.91	Aug. 21	2.47	Nov. 20	3.83
Mar. 21	3.95	June 26	+0.3	Sept. 24	3.09	Dec. 12	3.95

16. Teichmann.  $NE_4^1SE_4^1NE_4^1$  sec. 12, T. 20 S., R. 13 W. Drilled observation water-table well in Meade formation, diameter 6 inches, depth 49 feet. Highest water level 25.02 below lsd, Oct. 23, 1951; lowest 30.69 below lsd, Jan. 23, 1947. Records available: 1942-51.

Jan. 22	26.24	Apr. 14	26.38	July 11	26.04	Oct. 23	25.02
Feb. 12	26.20	16	26.34	Aug. 21	25.23	Nov. 20	25.06
Mar. 21	26.25	June 26	25.48	Sept. 24	25.05	Dec. 12	25.08

43. M. Hagen.  $SW_4^1SW_4^1SW_4^1$  sec. 20, T. 20 S., R. 11 W. Drilled observation water-table well in Meade formation, diameter 6 inches, depth 46 feet. Highest water level 12.97 below lsd, Aug. 21, 1951; lowest 21.21 below lsd, Jan. 19, 1944. Records available: 1942-51.

Jan. 22	15.10	Apr. 14	15.11	Aug. 21	12.97	Nov. 20	14.33
Feb. 12	15.43	16	15.87	Sept. 24	13.88	Dec. 12	14.60
Mar. 21	15.67	July 11	13.03	Oct. 23	14.13		

100. Unruh. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 11, T. 20 S., R. 15 W. Drilled observation water-table well in Dakota sandstone, diameter 5 inches, depth 76 feet. Highest water level 27.05 below lsd, June 23, 1949; lowest 35.14 below lsd, Nov. 16, 1947. Records available: 1944-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	33.11	Apr. 17	34.61	Sept. 25	31.95	Nov. 20	32.63
Feb. 13	33.27	June 25	29.60	Oct. 23	32.37	Dec. 13	32.69
Mar. 22	33.49						

103. F. Konareck. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 33, T. 17 S., R. 12 W. Drilled observation water-table well in alluvium, diameter 5 inches, depth 25 feet. Highest water level 0.25 below lsd, Aug. 29, 1950; lowest 7.66 below lsd, Aug. 21, 1946. Records available: 1944-51.

Jan. 22	2.93	Apr. 14	1.40	July 11	2.07	Oct. 23	2.48
Feb. 12	3.70	16	2.99	Aug. 21	2.07	Nov. 20	2.50
Mar. 21	2.97	June 26	1.36	Sept. 25	1.65	Dec. 12	2.79

107. Carter Oil Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 10, T. 17 S., R. 11 W. Drilled observation water-table well in Dakota sandstone, diameter 6 inches, depth 168 feet. Highest water level 95.39 below lsd, June 28, 1951; lowest 101.60 below lsd, Feb. 20, 1946. Records available: 1944-51.

Jan. 22	97.65	Apr. 14	97.70	Aug. 21	96.28	Nov. 20	96.49
Feb. 22	97.82	16	98.25	Sept. 25	96.55	Dec. 12	96.72
Mar. 21	97.99	June 26	95.39				

109. J. C. Cook. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 28, T. 18 S., R. 15 W. Drilled observation water-table well in alluvium, depth 46 feet. Highest water level 1.49 below lsd, July 11, 1951; lowest 14.61 below lsd, July 10, 1946. Records available: 1944-51.

Jan. 22	7.72	Apr. 15	8.02	Aug. 21	5.65	Nov. 21	7.15
Feb. 13	8.08	16	8.20	Sept. 25	5.91	Dec. 12	7.43
Mar. 22	8.10	July 11	1.49	Oct. 23	6.78		

110. Prudential Life Insurance Co. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 33, T. 17 S., R. 14 W. Drilled observation water-table well in alluvium, diameter 6 inches, depth 48 feet. Highest water level 11.73 below lsd, Aug. 21, 1951; lowest 23.00 below lsd, Oct. 20, 1948. Records available: 1944-51.

Jan. 23	15.25	Apr. 14	15.00	Aug. 21	11.73	Nov. 21	12.89
Feb. 13	15.45	16	15.46	Sept. 25	12.27	Dec. 12	12.92
Mar. 21	15.48	June 25	12.85	Oct. 23	12.69		

131. F. W. Gagelman. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 22, T. 19 S., R. 15 W. Drilled observation water-table well in alluvium, diameter 5 inches, depth 25 feet. Highest water level 7.84 below lsd, Oct. 23, 1951; lowest 14.81 below lsd, Sept. 23, 1948. Records available: 1944-51.

Jan. 23	10.16	Apr. 17	10.49	Sept. 25	8.41	Nov. 21	8.88
Feb. 13	10.32	June 25	8.05	Oct. 23	7.84	Dec. 13	9.12
Mar. 22	10.17						

#### Bourbon County

1. City of Fort Scott. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 29, T. 25 S., R. 25 E. Drilled unused water-table well in Jefferson City dolomite, diameter 8 to 6 inches, depth 1,461 feet. Highest water level 180.25 below lsd, Mar. 29, 1946; lowest 191.64 below lsd, Oct. 31, 1951. Records available: 1942-47, 1950-51. Jan. 8, 190.70; Oct. 31, 191.64; Dec. 28, 191.32.

2. City of Fort Scott. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 30, T. 25 S., R. 25 E. Drilled observation and industrial water-table well in deposit of Mississippian age, diameter 6 inches, depth 621 feet. Highest water level 55.90 below lsd, July 29, 1942; lowest 68.5 below lsd, Jan. 8, 1951. Records available: 1942-47, 1951. Jan. 8, 68.5. Measurement discontinued.

25-23-27bbb. Harold Comstock. Dug unused water-table well in Bandera shale, diameter 5 feet, depth 11 feet. No casing. Highest water level 1.53 below lsd, Sept. 28, 1951; lowest 6.13 below lsd, May 6, 1948. Records available: 1948-51. Apr. 18, 5.00; Aug. 2, 1.87; Sept. 28, 1.53; Nov. 30, 1.54.

25-24-13dd. John Ibson. Dug unused water-table well in Labette shale, diameter 6 feet, depth 23 feet, cribbed with rock. Highest water level 3.08 below lsd, Apr. 18, 1951; lowest 7.51 below lsd, Oct. 15, 1948. Records available: 1948-51. Apr. 18, 3.08; Aug. 2, 4.00; Sept. 28, 3.69; Nov. 30, 3.33.

#### Brown County

2-15-25dd. Henry Rieger. Dug unused water-table well in alluvium, diameter 36 inches, depth 14 feet, cribbed with rock. Highest water level 7.94 below lsd, Aug. 1, 1951; lowest 9.92 below lsd, Nov. 27, 1948. Records available: 1948-51. Apr. 17, 8.29; Aug. 1, 7.94.

4-17-17ada. H. C. Brown. Drilled unused water-table well in glacial deposits, diameter 6 inches, depth 51 feet, tile casing. Highest water level 31.19 below lsd, Nov. 27, 1951; lowest 37.19 below lsd, Nov. 27, 1948. Records available: 1948-51. Apr. 17, 33.17; Sept. 27, 33.72; Nov. 27, 31.19.

#### Chase County

18-9-29cc. Peak & Hatcher Co. Drilled domestic water-table well in Bader limestone and Elk Creek shale, diameter 8 inches, depth 34 feet. Highest water level 17.57 below lsd, July 24, 1951; lowest 24.63 below lsd, Oct. 3, 1947. Records available: 1947-51. Jan. 16, 24.40; July 24, 17.57; Nov. 5, 20.70.

19-7-10da. Herbert T. Drake. Dug unused water-table well in alluvium, diameter 42 inches, depth 24 feet, cribbed with rock. Highest water level 3.19 below lsd, July 24, 1951; lowest 12.00 below lsd, Mar. 6, 1950. Records available: 1948-51. Jan. 16, 9.74; July 24, 3.19; Nov. 5, 5.50.

19-9-30cc. E. E. Andrews. Drilled unused water-table well in Red Eagle limestone, diameter 8 inches, depth 65 feet. Highest water level 30.83 below lsd, July 24, 1951; lowest 41.22 below lsd, June 8, 1948. Records available: 1947-51. Jan. 16, 40.08; July 24, 30.83; Nov. 6, 35.52.

20-6-31bd. B. S. Thompson. Drilled unused water-table well in Wreford formation, diameter 6 inches, depth 43 feet. Highest water level 14.20 below lsd, July 24, 1951; lowest 25.25 below lsd, Mar. 27, 1948. Records available: 1947-51. Jan. 16, 23.97; July 24, 14.20; Nov. 5, 19.64.

20-7-13cb. Geo.W. Starkey. Dug domestic water-table well in Fort Riley and Florence limestone, diameter 4 feet, depth 56 feet, cribbed with rock. Highest water level 8.87 below lsd, Sept. 5, 1950; lowest 19.09 below lsd, Mar. 27, 1948. Records available: 1947-51. Jan. 16, 15.95; Nov. 5, 11.01.

20-8-2bd. School district. Drilled unused water-table well in valley alluvium, diameter 5 inches, depth 21 feet. Highest water level 2.32 below lsd, July 24, 1951; lowest 10.96 below lsd, Mar. 6, 1950. Records available: 1947-51. Jan. 16, 9.44; July 24, 2.32; Nov. 5, 3.62.

20-8-16aa. Gerald Brough. Drilled domestic water-table well in Cottonwood limestone, diameter 7 inches, depth 33 feet. Highest water level 3.28 below lsd, July 24, 1951; lowest 10.57 below lsd, Sept. 26, 1947. Records available: 1947-51. Jan. 16, 6.18; July 24, 3.28; Nov. 5, 4.23.

20-9-26dd. Ethel Welch Bell. Drilled domestic water-table well in Crouse limestone, diameter 7 inches, depth 29 feet. Highest water level 13.65 below lsd, Sept. 5, 1950; lowest 16.47 below lsd, Jan. 16, 1951. Records available: 1947-51. Jan. 16, 16.47; Nov. 5, 15.61.

22-6-11cc. Margaret Smith. Drilled unused water-table well in Fort Riley and Florence limestone, diameter 5 inches, depth 86 feet. Highest water level 2.58 below lsd, July 24, 1951; lowest 7.95 below lsd, Sept. 23, 1947. Records available: 1947-51. Jan. 16, 7.10; July 24, 2.58; Nov. 5, 4.12.

#### Cherokee County

1. W. L. Stiles. NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 2, T. 34 S., R. 23 E. Dug domestic water-table well in Bluejacket sandstone, diameter 6 feet, depth 27 feet. Highest water level 5.50 below lsd, May 26, 1943; lowest 14.60 below lsd, Jan. 25, 1944. Records available: 1942-45, 1948, 1950-51. Jan. 4, 13.56; Mar. 1, 11.82; Oct. 30, 9.28; Dec. 28, 8.72.

3. Mr. Fleming. SW $\frac{1}{4}$  sec. 19, T. 32 S., R. 24 E. Unused water-table well in Roubidoux sandstone, diameter 8 inches, depth 850 feet. Highest water level 196.53 below lsd, July 23, 1943; lowest 208.35 below lsd, Jan. 4, 1951. Records available: 1943, 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3, '43 24	197.83 197.24	Mar. 25, '43 Apr. 24	196.89 196.88	May 24, '43 June 24	197.04 197.33	July 23, '43 Jan. 4, '51	196.53 208.35

105a. Barnsdall Zinc Co. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 22, T. 29 N., R. 34 W. Drilled unused water-table well in Roubidoux sandstone, diameter 8 inches, depth 901 feet. Highest water level 123.90 below lsd, Dec. 28, 1951; lowest 161.55 below lsd, Nov. 27, Dec. 27, 1943. Records available: 1942-43, 1950-51. Jan. 4, 147.45; Mar. 1, 145.75; Oct. 26, 133.94; Dec. 28, 123.90. In 1952 and subsequent reports, this well will be listed under Jasper County, Missouri.

Cheyenne County

1-38-2cd. Paul O'Brien. Drilled irrigation water-table well in alluvium, diameter 18 inches, depth 42 feet. Highest water level 21.57 below lsd, July 25, 1951; lowest 23.02 below lsd, Aug. 3, 1948. Records available: 1948-51. July 25, 21.57

1-38-8ddb. H. O. Haines. Drilled irrigation water-table well in alluvium, diameter 18 inches, depth 34 feet. Highest water level 11.24 below lsd, Feb. 25, 1947; lowest 13.32 below lsd, Sept. 7, 1947. Records available: 1946-51. July 25, 11.60.

1-38-17cdd. F. J. Ostick. Drilled domestic and observation water-table well in alluvium, diameter 5 inches, depth 22 feet. Highest water level 11.07 below lsd, July 25, 1951; lowest 12.57 below lsd, Oct. 5, 1948. Records available: 1946-51. July 25, 11.07.

2-39-2cbb. Vera Gorthy. Drilled observation well, diameter 5 inches, depth 27 feet. Highest water level 12.42 below lsd, Sept. 11, 1950; lowest 19.03 below lsd, Mar. 28, 1946. Records available: 1946-50. Measurement discontinued.

2-39-10bba. A. L. Pugh. Drilled unused water-table well in alluvium, diameter 5 inches, depth 39 feet. Highest water level 25.27 below lsd, July 29, 1947; lowest 27.10 below lsd, Aug. 3, 1948. Records available: 1947-51. July 25, 25.35.

2-39-17bba. Myrtle E. Armstrong. Dug stock well, diameter 24 inches, depth 13 feet. Highest water level 10.38 below lsd, June 8, 1947; lowest 12.56 below lsd, Sept. 7, 1947. Records available: 1946-47, 1949-50. No measurement made in 1951.

2-39-19ccc. A. C. Keller. Drilled well, diameter 4 inches, depth 23 feet. Highest water level 15.52 below lsd, Aug. 2, 1949; lowest 16.45 below lsd, Oct. 5, 1948. Records available: 1948-50. No measurement made in 1951.

2-39-27bbb. G. W. Best. Drilled unused water-table well in alluvium, diameter 8 inches, depth 29 feet. Highest water level 16.37 below lsd, July 25, 1951; lowest 19.50 below lsd, Mar. 27, 1946. Records available: 1946-51. July 25, 16.37.

3-40-9baa. P. G. Walter. Drilled stock and observation water-table well in alluvium, diameter 5 inches, depth 16 feet. Highest water level 11.69 below lsd, Feb. 25, 1947; lowest 20.05 below lsd, July 25, 1951. Records available: 1946-51. July 25, 20.05.

3-40-22aba. T. Holleman and others. Drilled unused water-table well in alluvium, diameter 5 inches, depth 19 feet. Highest water level 10.02 below lsd, July 29, 1947; lowest 15.18 below lsd, Mar. 9, 1946. Records available: 1946-51. July 25, 11.11.

3-40-28cbb. D. Danielson. Drilled observation water-table well in alluvium, diameter 5 inches, depth 28 feet. Highest water level 10.02 below lsd, Mar. 20, 1946; lowest 12.75 below lsd, Aug. 16, 1946. Records available: 1946-51. July 25, 11.00.

3-40-33dda. H. L. Harkins. Drilled unused water-table well in Ogallala formation and colluvium, diameter 6 inches, depth 27 feet. Highest water level 11.90 below lsd, July 29, 1947; lowest 14.50 below lsd, Mar. 4, 1946. Records available: 1946-51. July 25, 12.27.

3-41-13ccd. F. Walz. Drilled unused domestic well, diameter 5 inches, depth 15 feet. Highest water level 7.83 below lsd, Mar. 16, 1949; lowest 15.78 below lsd, August 16, 1946. Records available: 1946-50. No measurement made in 1951.

4-41-2aad. W. E. Johnson. Drilled domestic and stock observation water-table well in alluvium, diameter 6 inches, depth 30 feet. Highest water level 20.04 below lsd, July 12, 1950; lowest 28.53 below lsd, Oct. 4, 1949. Records available: 1946-51. July 25, 25.99.

4-41-32ddb. Simon E. Matson. Drilled observation water-table well in Ogallala formation, diameter 6 inches, depth 121 feet. Highest water level 113.10 below lsd, July 25, 1951; lowest 114.76 below lsd, Aug. 16, 1946. Records available: 1946-47, 1949-51. July 25, 113.10.

4-42-24cac. Jake Waltz. Drilled irrigation water-table well in Ogallala formation, diameter 24 inches, depth 72 feet. Highest water level 24.48 below lsd, July 25, 1951; lowest 25.89 below lsd, Sept. 7, 1947. Records available: 1946-51. July 25, 24.48.

5-42-4aac. A. Corder. Drilled stock well, diameter 6 inches, depth 37 feet. Highest water level 21.83 below lsd, Dec. 5, 1947 and June 8, 1948; lowest 23.68 below lsd, Aug. 2, 1949. Records available: 1946-50. No measurement made in 1951.

Clark County

6. District School. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 7, T. 35 S., R. 21 W. Drilled unused water-table well in alluvium, diameter 6 inches, depth 36 feet. Highest water level 26.28 below lsd, June 19, 1951; lowest 27.69 below lsd, Oct. 5, 1943. Records available: 1940-43, 1950-51. Mar. 19, 26.79; June 19, 26.28; Sept. 19, 26.47; Dec. 19, 26.73.

Coffey County

20-15-34dcb. G. Skillman. Dug unused water-table well in Kanwaka shale, diameter 30 inches, depth 40 feet, cribbed with rock. Highest water level 1.71 below lsd, Mar. 1, 1949; lowest 8.35 below lsd, Nov. 26, 1948. Records available: 1948-51. Apr. 18, 6.09; Aug. 2, 2.66; Sept. 28, 2.61; Nov. 27, 3.00.

22-15-34da. B. D. Harrel. Dug unused water-table well in Lawrence shale, diameter 36 inches, depth 18 feet, cribbed with rock. Highest water level 6.57 below lsd, Aug. 2, 1951; lowest 16.90 below lsd, Oct. 15, 1948. Records available: 1948-51. Apr. 18, 8.43; Aug. 2, 6.57; Sept. 28, 7.36; Nov. 30, 7.98.

Comanche County

1. A. A. Carpenter. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 33 S., R. 20 W. Drilled unused water-table well in deposits of Permian age, diameter 6 inches, depth 43 feet. Highest water level 35.30 below lsd, Sept. 19, 1951; lowest 40.52 below lsd, June 20, 1941. Records available: 1940-51. Mar. 19, 36.62; June 19, 36.43; Sept. 19, 35.30; Dec. 19, 36.09.

9. H. R. Burnette. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 13, T. 32 S., R. 17 W. Drilled unused water-table well, diameter 5 inches, depth 102 feet. Highest water level 84.70 below lsd, June 13, 1950; lowest 98.30 below lsd, Dec. 20, 1946. Records available: 1940-51. Mar. 19, 85.38.

Douglas County

13-20-11bab. Armstrong Martin. Drilled stock water-table well in terrace deposits, diameter 8 inches, depth 38 feet. Highest water level 6.32 below lsd, Aug. 2, 1951; lowest 19.88 below lsd, Nov. 26, 1948. Records available: 1948-51. Apr. 18, 12.49; Aug. 2, 6.32; Sept. 28, 7.13; Nov. 27, 7.59.

14-19-23cccc. C. A. Puckett. Dug unused water-table well in Lawrence shale, diameter 36 inches, depth 13 feet, cribbed with rock. Highest water level 3.54 below lsd, Mar. 1, 1949; lowest 5.26 below lsd, Oct. 15, 1948. Records available: 1948-51. Apr. 18, 3.73; Aug. 2, 3.95; Sept. 28, 3.74; Nov. 30, 3.77.

Edwards County

1. M. Shouse. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 35, T. 24 S., R. 19 W. Dug and drilled unused water-table well in alluvium, diameter 16 inches, depth 28 feet. Highest water level 3.17 below lsd, June 25, 1951; lowest 7.97 below lsd, Sept. 13, 1946. Records available: 1944-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	6.26	Apr. 16	6.21	June 25	3.17	Oct. 22	5.84
Feb. 12	6.20	May 14	5.05	Aug. 26	5.06	Nov. 19	5.80
Mar. 21	6.12	June 10	3.67	Sept. 24	5.43	Dec. 12	5.86

10. E. F. Lippoldt. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, T. 23 S., R. 19 W. Dug unused water-table well in terrace deposits of Pleistocene age, diameter 4 $\frac{1}{2}$  feet, depth 70 feet, rock casing. Highest water level 63.42 below lsd, July 2, 1947; lowest 68.20 below lsd, Mar. 13, 1946. Records available: 1944-51.

Feb. 12	64.65	May 14	64.10	Aug. 26	63.88	Nov. 20	63.70
Mar. 21	64.28	June 10	63.93	Sept. 24	63.87	Dec. 12	63.73
Apr. 16	64.25	25	64.01	Oct. 22	63.96		

Ellis County

1. City of Hays. Records available: 1946-48, 1950. Measurement discontinued.

215. A. H. Romine. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 11 S., R. 16 W. Dug stock water-table well in deposits of Pleistocene age, diameter 24 inches, depth 20 feet, cribbed with rock. Highest water level 9.76 below lsd, July 23, 1951; lowest 17.70 below lsd, Oct. 15, 1947. Records available: 1941-51. Jan. 23, 13.35; Apr. 16, 11.79; July 23, 9.76; Oct. 23, 14.20.

218. W. W. Bemis. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 16, T. 12 S., R. 17 W. Dug unused water-table well in Codell sandstone, diameter 24 inches, depth 83 feet. Highest water level 11.76 below lsd, July 23, 1951; lowest 54.67 below lsd, Dec. 22, 1943. Records available: 1941-51. Jan. 23, 47.86; Apr. 16, 39.73; July 23, 11.76; Oct. 23, 12.29.

14-16-17cb. J. M. Schippers. Dug stock water-table well in alluvium, diameter 5 feet, depth 24 feet, cribbed with stone. Highest water level 15.22 below lsd, July 27, 1951; lowest 19.88 below lsd, Nov. 16, 1950. Records available: 1946-51. Jan. 17, 18.47; Mar. 15, 19.20; July 27, 15.22; Aug. 27, 16.26; Oct. 26, 16.28; Dec. 26, 17.15.

14-16-36bc. Tony Wagner. Dug stock and observation water-table well in sand, diameter 4 feet, depth 29 feet, cribbed with stone. Highest water level 14.50 below lsd, Oct. 26, 1951; lowest 21.74 below lsd, May 10, 1947. Records available: 1946-51. Jan. 17, 19.62; Mar. 15, 18.77; Aug. 27, 15.02; Oct. 26, 14.50; Dec. 26, 15.98.

14-18-12bb. J. Brull. Dug domestic and stock water-table well in sand, diameter 4 feet, depth 31 feet, cribbed with stone. Highest water level 19.90 below lsd, Dec. 26, 1951; lowest 27.15 below lsd, July 30, 1946. Records available: 1946-51. Jan. 17, 23.65; Mar. 15, 22.89; May 15, 22.88; Oct. 26, 20.23; Dec. 26, 19.90.

14-18-26aa. F. J. Befort. Dug domestic and stock water-table well in deposits of Pleistocene age, diameter 4 feet, depth 24 feet, cribbed with stone. Highest water level 14.60 below lsd, July 27, 1951; lowest 20.85 below lsd, Jan. 8, 1948. Records available: 1946-51. Jan. 17, 18.47; Mar. 15, 18.41; May 15, 17.58; July 27, 14.60; Oct. 26, 18.49; Dec. 26, 15.00

14-20-35dc. F. A. Pfannenstiel. Dug domestic well, diameter 6 feet, depth 20 feet. Records available: 1946-50. Measurement discontinued.

15-16-6dd. Ted Thalen. Dug domestic and stock observation water-table well in alluvium, diameter 4 $\frac{1}{2}$  feet, depth 30 feet, cribbed with stone. Highest water level 18.12 below lsd, Aug. 27, 1951; lowest 24.33 below lsd, Aug. 9, 1946. Records available: 1946-51. Jan. 17, 21.19; Mar. 15, 21.40; Aug. 27, 18.12; Dec. 26, 18.32.

15-16-13bb. Ethel M. Witt. Dug domestic and stock observation water-table well in sand, diameter 4 feet, depth 17 feet, cribbed with stone. Highest water level 13.29 below lsd, Aug. 27, 1951; lowest 14.85 below lsd, July 17, 1946. Records available: 1946-51. Jan. 17, 14.56; Mar. 15, 14.34; July 27, 13.34; Aug. 27, 13.29; Oct. 26, 13.97; Dec. 26, 13.42.

15-17-19ab. Liker. Drilled well, diameter 6 inches, depth 247 feet. Records available: 1946-50. Measurement discontinued.

15-17-25cb. George Meder. Dug domestic and observation water-table well, diameter 4 feet, depth 15 feet, cribbed with stone. Highest water level 10.08 below lsd, July 27, 1951; lowest 12.99 below lsd, Feb. 10, 1950. Records available: 1946-51. Jan. 17, 11.69; July 27, 10.08; Aug. 27, 10.27; Oct. 26, 10.50; Dec. 26, 10.90.

15-18-1bb. Mat Rohr. Dug stock and observation water-table well in deposits of Pleistocene age, diameter 24 inches, depth 33 feet, cribbed with stone. Highest water level 16.04 below lsd, Dec. 26, 1951; lowest 28.22 below lsd, July 24, 1946. Records available: 1946-51. Jan. 17, 19.15; Mar. 15, 18.17; May 15, 16.69; Dec. 26, 16.04.

15-18-16bb. T. W. Wolf. Dug domestic and stock water-table well in sand, diameter 40 inches, depth 16 feet, cribbed with stone. Highest water level 1.17 below lsd, May 15, 1951; lowest 9.55 below lsd, July 12, 1946. Records available: 1946-51. Mar. 15, 4.05; May 15, 1.17; July 27, 2.43; Aug. 27, 2.25; Oct. 26, 3.23; Dec. 26, 3.96.

15-19-13ab. Pete Wolfe. Dug stock and observation water-table well in sand of Pleistocene age, diameter 36 inches, depth 13 feet, cribbed with rock. Highest water level 2.18 below lsd, Aug. 27, 1951; lowest 9.30 below lsd, Oct. 8, 1947. Records available: 1946-51. Jan. 17, 6.55; July 27, 2.36; Aug. 27, 2.18; Oct. 26, 2.87; Dec. 26, 3.30.

15-19-35aa. J. Zimmerman. Drilled stock well, diameter 6 inches, depth 150 feet. Records available: 1946-50. Measurement discontinued.

#### Finney County

1. Mrs. A. M. Reid. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 24 S., R. 33 W. Drilled observation water-table well, diameter 15 inches, depth 21 feet. Highest water level 1.05 below lsd, June 29, 1951; lowest 11.46 below lsd, Mar. 8, 1941. Records available: 1936-51.

1--Continued.

## Daily mean water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.40	5.35	5.28	5.36	5.34	3.57	1.32	3.80	4.44	4.30	4.64	4.64
2	5.40	5.36	5.24	5.37	5.38	3.04	1.60	3.83	4.46	4.31	4.60	4.62
3	5.40	5.39	5.23	5.36	5.41	3.14	1.86	3.89	4.49	4.34	4.61	4.66
4	5.42	5.40	5.23	5.35	5.43	3.33	2.05	3.94	4.52	4.38	4.62	4.63
5	5.42	5.41	5.22	5.34	5.43	3.43	2.20	3.98	4.55	4.42	4.65	4.62
6	5.43	5.45	5.26	5.33	5.45	3.48	2.35	4.01	4.55	4.45	4.63	4.64
7	5.43	5.46	5.27	5.32	5.45	3.53	2.43	4.05	3.47	4.47	4.61	4.70
8	5.41	5.46	5.29	5.29	5.45	3.59	2.58	4.04	1.84	4.49	4.56	4.72
9	5.40	5.46	5.30	5.28	5.45	3.62	2.69	3.95	2.45	4.50	4.55	4.73
10	5.42	5.46	5.30	5.28	5.45	2.23	2.77	3.93	2.65	4.50	4.57	4.73
11	5.40	5.43	5.33	5.28	5.45	1.41	2.88	3.97	3.08	4.51	4.55	4.73
12	5.41	5.46	5.35	5.24	5.45	1.14	2.93	4.01	3.32	4.52	4.52	4.73
13	5.42	5.49	5.33	5.23	5.45	1.49	2.96	4.07	3.48	4.55	4.51	4.73
14	5.43	5.48	5.34	5.23	5.45	1.93	2.96	4.13	3.60	4.55	4.55	4.75
15	5.43	5.46	5.34	5.24	5.44	2.24	2.99	4.19	3.71	4.55	4.57	4.73
16	5.39	5.45	5.33	5.24	5.30	2.44	3.05	4.21	3.76	4.58	4.62	....
17	5.39	5.46	5.36	5.22	5.08	2.59	3.12	4.24	3.82	4.59	4.65	....
18	5.38	5.46	5.38	5.24	4.97	2.74	3.17	4.29	3.85	4.60	4.64	....
19	5.36	5.47	5.39	5.25	4.94	2.85	3.24	4.33	3.90	4.57	4.64	....
20	5.37	5.48	5.39	5.27	4.93	2.89	3.25	4.19	3.95	4.55	4.63	....
21	5.34	5.47	5.39	5.29	4.85	1.52	3.06	3.83	4.01	4.59	4.64	....
22	5.30	5.47	5.37	5.32	3.80	1.51	3.08	3.90	4.04	4.63	4.65	....
23	5.32	5.48	5.40	5.29	3.76	1.61	3.26	3.99	4.06	4.63	4.65	....
24	5.31	5.46	5.41	5.29	3.64	1.90	3.35	....	4.11	4.64	4.65	....
25	5.29	5.45	5.42	5.33	3.91	1.45	3.37	....	4.12	4.64	4.65	....
26	5.26	5.42	5.41	5.33	3.97	1.31	3.44	....	4.15	4.64	4.65	....
27	5.28	5.39	5.40	5.34	4.01	1.71	3.50	....	4.21	4.64	4.65	4.85
28	5.30	5.33	5.43	5.34	4.02	1.32	3.58	4.24	4.24	4.64	4.65	4.84
29	5.31	....	5.41	5.33	4.08	1.05	3.64	4.27	4.25	4.60	4.65	4.84
30	5.32	....	5.37	5.34	4.08	1.08	3.71	4.35	4.28	4.62	4.65	4.85
31	....	....	5.36	....	3.56	....	3.77	4.40	4.63	....	4.85	....

2. Maggie B. Smith. Drilled unused well, diameter 8 inches, depth 112 feet. Records available: 1934, 1939-42, 1944-48. Measurement discontinued.

5. E. Alberta Reeves. SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 19, T. 21 S., R. 32 W. Drilled unused water-table well in deposits of Pleistocene age, diameter 6 inches, depth 32 feet. Highest water level 15.30 below lsd, Aug. 14, 1951; lowest 22.54 below lsd, Jan. 28, 1940. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	16.55	Apr. 23	16.79	July 18	15.36	Oct. 17	15.33
Feb. 8	16.63	May 29	16.64	Aug. 14	15.30	Nov. 6	15.38
Mar. 29	16.80	June 18	16.37	Sept. 27	15.34	Dec. 10	15.44

6. T. A. Meakel. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 36, T. 21 S., R. 29 W. Drilled unused water-table well in alluvium, diameter 8 inches, depth 26 feet. Highest water level 11.88 below lsd, Dec. 13, 1951; lowest 20.82 below lsd, June 22, 1946. Records available: 1939-51. Jan. 24, 12.38; May 31, 11.90; Oct. 29, 11.97; Dec. 13, 11.88.

8. O. G. Reeve. SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 13, T. 25 S., R. 33 W. Drilled unused water-table well in deposits of Pleistocene age, diameter 6 inches, depth 83 feet. Highest water level 72.67 below lsd, Feb. 14 and Aug. 28, 1951; lowest 75.25 below lsd, June 21, 1940. Records available: 1939-51. Feb. 14, 72.67; May 31, 72.68; Aug. 28, 72.67; Dec. 5, 72.72.

13. Edwin Wehrley. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 13, T. 25 S., R. 31 W. Dug unused water-table well in sand and gravel, diameter 24 inches, depth 5 feet. Highest water level 0.76 above lsd, May 5, 1942; lowest 4.63 below lsd, Sept. 23, 1939. Records available: 1939-51.

Jan. 22	2.89	Apr. 16	2.87	July 10	1.23	Oct. 22	2.95
Feb. 12	2.81	May 14	3.00	Aug. 20	2.41	Nov. 19	2.71
Mar. 21	2.80	June 25	.84	Sept. 24	2.38	Dec. 12	2.67

23. J. E. Ely.  $SE\frac{1}{4}SW\frac{1}{4}SE\frac{1}{4}$  sec. 4, T. 23 S., R. 32 W. Drilled unused water-table well in deposits of Pleistocene age, diameter 6 inches, depth 60 feet. Highest water level 37.36 below lsd, Oct. 29, 1951; lowest 45.30 below lsd, Feb. 17, 1940. Records available: 1939-51. Apr. 30, 39.40; July 25, 37.56; Oct. 29, 37.36.

26. Garden City Experiment Station.  $SW\frac{1}{4}NE\frac{1}{4}SE\frac{1}{4}$  sec. 3, T. 24 S., R. 32 W. Drilled unused water-table well in sand and gravel, diameter 26 inches, depth 196 feet. Highest water level 61.59 below lsd, Oct. 21, 1949; lowest 71.60 below lsd, Apr. 24, 1941. Records available: 1934, 1939-51. Jan. 24, 68.44; Apr. 20, 66.58; July 25, 65.29; Oct. 29, 63.85.

1002. U. S. Army.  $SW\frac{1}{4}$  sec. 27, T. 24 S., R. 31 W. Drilled industrial water-table well in Ogallala formation, diameter 16 inches, depth 295 feet. Highest water level 111.65 below lsd, Nov. 19, 1951; lowest 123.50 below lsd, Jan. 12, 1949. Records available: 1942-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	113.87	Apr. 16	113.92	July 10	111.90	Oct. 22	112.38
Feb. 12	112.30	May 14	112.13	Aug. 20	111.80	Nov. 19	111.65
Mar. 21	112.16	June 25	113.15	Sept. 24	112.06	Dec. 12	111.66

1005. U. S. Army.  $SW\frac{1}{4}$  sec. 27, T. 24 S., R. 31 W. Drilled industrial water-table well in Ogallala formation, diameter 16 inches, depth 170 feet. Highest water level 107.38 below lsd, Jan. 17, 1948; lowest 127.45 below lsd, Jan. 12, 1949. Records available: 1942-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	111.86	Apr. 16	113.86	July 10	113.44	Oct. 22	113.51
Feb. 12	113.78	May 14	114.28	Aug. 20	113.81	Nov. 19	113.64
Mar. 21	115.25	June 25	115.13	Sept. 24	113.48	Dec. 12	113.15

21-30-5bb. F. T. Carl. Drilled domestic and stock water-table well, diameter 6 inches, depth 44 feet. Records available: 1951. Aug. 9, 27.51.

#### Ford County

8. F. H. Diehl.  $NW\frac{1}{4}NW\frac{1}{4}$  sec. 34, T. 26 S., R. 25 W. Drilled irrigation water-table well in alluvium, diameter 20 inches, depth 23 feet. Highest water level 0.86 below lsd, May 13, 1942; lowest 8.17 below lsd, Nov. 7, 1939. Records available: 1938-51. Jan. 22, 5.80; Apr. 16, 5.80; June 10, 3.80; Oct. 22, 5.16.

38. F. Burns.  $SE\frac{1}{4}NE\frac{1}{4}$  sec. 1, T. 26 S., R. 24 W. Drilled unused well, diameter 4 inches, depth 47 feet. Records available: 1938-50. Measurement discontinued.

57. Andrew Bogner.  $NW\frac{1}{4}SE\frac{1}{4}$  sec. 22, T. 26 S., R. 26 W. Drilled irrigation well, diameter 20 inches, depth 27 feet. Records available: 1938-48. Measurement discontinued.

59. Ward Byers Estate.  $NE\frac{1}{4}NE\frac{1}{4}$  sec. 21, T. 26 S., R. 26 W. Drilled irrigation water-table well in Ogallala formation, diameter 16 inches, depth 187 feet. Highest water level 13.63 below lsd, Aug. 29, 1950; lowest 26.98 below lsd, Aug. 9, 1946. Records available: 1938-51. Jan. 22, 15.32; Feb. 12, 15.95; Apr. 16, 15.56; May 14, 13.80.

65. John N. Clark.  $SW\frac{1}{4}SW\frac{1}{4}$  sec. 33, T. 26 S., R. 25 W. Drilled irrigation well, diameter 20 inches, depth 23 feet. Records available: 1938-48. Measurement discontinued.

96. Henry Hattrup.  $SE\frac{1}{4}NE\frac{1}{4}$  sec. 23, T. 26 S., R. 21 W. Drilled irrigation water-table well in alluvium, diameter 34 inches, depth 29 feet. Highest water level 5.76 below lsd, June 10, 1951; lowest 10.22 below lsd, Sept. 5, 1939. Records available: 1938-51. Jan. 22, 7.78; Apr. 16, 7.70; June 10, 5.76; Oct. 22, 6.08.

237. Atchison, Topeka & Santa Fe Railway.  $NW\frac{1}{4}NW\frac{1}{4}$  sec. 28, T. 25 S., R. 22 W. Drilled unused industrial well, diameter 10 inches, depth 166 feet. Records available: 1939-49. Measurement discontinued.

1002. Dept. of the Army. Center of  $SE\frac{1}{4}$  sec. 12, T. 26 S., R. 26 W. Drilled industrial water-table well in Ogallala formation, diameter 16 inches, depth 262 feet. Highest water level 98.18 below lsd, Jan. 22, 1951; lowest 185.18 below lsd, Nov. 26, 1942. Records available: 1942-49, 1951.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 28, 1949	103.49	Nov. 21, 1949	103.51	Apr. 16, 1951	103.37	Sept. 24, 1951	103.61
July 14	104.28	Dec. 20	108.57	May 14	103.29	Oct. 19	102.81
Aug. 29	103.43	Jan. 22, 1951	98.18	June 10	103.26	22	103.46
Sept. 19	104.60	Feb. 12	103.45	20	103.04	Dec. 12	102.90
Oct. 16	103.31	Mar. 21	103.39	Aug. 20	103.31		

1003. U. S. Army. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 13, T. 26 S., R. 26 W. Drilled industrial water-table well in Ogallala formation, diameter 13 inches, depth 255 feet. Highest water level 94.35 below lsd, July 4, 1944; lowest 109.52 below lsd, Aug. 19, 1943. Records available: 1942-51.

Date	Water level						
Jan. 22	100.85	May 14	103.69	June 20	100.81	Oct. 22	105.28
Mar. 21	104.25	June 10	103.50	Oct. 19	103.72	Dec. 12	100.49

#### Franklin County

17-19-11da. L. W. Seright. Drilled unused water-table well in Weston shale and Stanton limestone, diameter 6 inches, depth 17 feet. Highest water level 3.61 below lsd, Aug. 2, 1951; lowest 8.72 below lsd, Nov. 26, 1948. Records available: 1948-51. Apr. 18, 7.01; Aug. 2, 3.61; Sept. 28, 3.67; Nov. 30, 5.13.

#### Grant County

1. F. C. Williams. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 30, T. 27 S., R. 37 W. Drilled unused well, diameter 6 inches, depth 57 feet. Records available: 1941-48. Measurement discontinued.

4. Flossie J. Andes. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 27 S., R. 38 W. Drilled unused water-table well in Ogallala formation, diameter 8 inches, depth 99 feet. Highest water level 84.16 below lsd, Dec. 18, 1951; lowest 87.52 below lsd, May 14, 1941. Records available: 1941-51. Jan. 18, 84.70; Feb. 21, 84.63; Mar. 12, 84.71; Aug. 22, 84.46; Oct. 25, 84.25; Nov. 28, 84.24; Dec. 18, 84.16.

5. C. L. Jury. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 4, T. 27 S., R. 37 W. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 78 feet. Highest water level 65.53 below lsd, May 9 and Nov. 28, 1951; lowest 69.15 below lsd, Aug. 16, 1949. Records available: 1941-51. Feb. 21, 65.77; May 9, 65.53; Aug. 22, 67.94; Nov. 28, 65.53.

7. Ethel W. Hoffman. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 36, T. 28 S., R. 36 W. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 91 feet. Highest water level 78.65 below lsd, Nov. 28, 1951; lowest 82.76 below lsd, Sept. 25, 1943. Records available: 1941-51. Feb. 21, 80.55; May 9, 80.50; Aug. 22, 79.44; Nov. 28, 78.65.

8. E. O. Stuart. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 33, T. 29 S., R. 35 W. Drilled unused stock well, diameter 4 inches, depth 77 feet. Records available: 1941-48. Measurement discontinued.

11. J. A. Hoffman. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 26, T. 28 S., R. 38 W. Drilled unused water-table well in Ogallala formation, diameter 4 inches, depth 69 feet. Highest water level 45.99 below lsd, May 10, 1945; lowest 51.14 below lsd, May 9, 1951. Records available: 1941-51. Jan. 18, 50.10; Feb. 22, 50.04; Mar. 12, 49.95; Apr. 19, 49.90; May 9, 51.14; June 11, 50.20. Measurement discontinued.

13. Fred Powell. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 5, T. 29 S., R. 36 W. Drilled unused well, diameter 4 inches, depth 119 feet. Records available: 1941-48. Measurement discontinued.

14. Mr. Hall. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 31, T. 28 S., R. 36 W. Drilled unused well, diameter 6 inches, depth 300 feet. Records available: 1941-49. Measurement discontinued.

400. State of Kansas. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, T. 28 S., R. 38 W. Drilled observation water-table well in Ogallala formation, diameter 12 inches, depth 100 feet. Highest water level 52.78 below lsd, Feb. 28, 1945; lowest 57.89 below lsd, Sept. 16, 1951. Records available: 1944-51.

Day	Daily mean water level from recorder graph											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	56.90	.....	56.67	56.66	56.88	56.90	56.77	56.84	57.65	57.83	57.51	57.19
2	56.91	.....	56.68	56.66	56.88	56.89	56.76	56.85	57.67	57.83	57.50	57.17
3	56.91	.....	56.69	56.66	56.88	56.88	56.74	56.86	57.69	57.83	57.49	57.17
4	56.91	.....	56.70	56.66	56.88	56.89	56.73	56.92	57.71	57.83	57.45	57.15
5	56.90	.....	56.71	56.67	56.88	56.90	56.73	56.98	57.72	57.83	57.44	57.15
6	.....	.....	56.73	56.69	56.89	56.89	56.71	57.03	57.75	57.83	57.44	57.12
7	.....	.....	56.73	56.72	56.90	56.88	56.71	57.07	57.77	57.82	57.42	57.12
8	.....	.....	56.73	56.72	56.91	56.86	56.70	57.11	57.79	57.81	57.41	57.11
9	.....	.....	56.72	56.71	57.03	56.86	56.70	57.14	57.80	57.78	57.40	57.10
10	.....	.....	56.72	56.70	57.06	56.85	56.70	57.18	57.81	57.77	57.38	57.08
11	.....	.....	56.73	56.70	57.10	56.83	56.70	57.22	57.83	57.77	57.37	57.08
12	.....	.....	56.75	56.70	57.13	56.82	56.70	57.26	57.84	57.77	57.36	57.06
13	.....	.....	56.75	56.70	57.15	56.81	56.70	57.30	57.85	57.76	57.34	57.04
14	.....	.....	56.75	56.72	57.16	56.81	56.69	57.34	57.87	57.76	57.34	57.03
15	.....	.....	56.73	56.74	57.16	56.80	56.68	57.36	57.88	57.75	57.33	57.03

400--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	.....	.....	56.70	56.77	57.16	56.79	56.68	57.39	57.89	57.75	57.32	.....
17	.....	.....	56.68	56.78	57.15	56.78	56.67	57.41	57.88	57.75	57.30	.....
18	56.80	.....	56.68	56.78	57.13	56.77	56.67	57.44	57.88	57.75	57.30	.....
19	56.79	.....	56.67	56.80	57.11	56.76	56.67	57.46	57.87	57.75	57.29	.....
20	56.78	.....	56.67	56.82	57.08	56.76	56.66	57.49	57.85	57.75	57.28	.....
21	56.77	56.64	56.66	56.83	57.06	56.78	56.66	57.54	57.85	57.74	57.27	.....
22	56.77	56.64	56.65	56.85	57.03	56.79	56.67	57.57	57.85	57.72	57.27	.....
23	56.77	56.63	56.65	56.87	57.01	56.80	56.69	57.58	57.85	57.70	57.27	.....
24	56.77	56.63	56.65	56.87	56.99	56.81	56.72	57.58	57.85	57.67	57.25	.....
25	56.76	56.63	56.65	56.89	56.97	56.81	56.77	57.57	57.85	57.66	57.25	.....
26	56.75	56.65	56.65	56.91	56.96	56.79	56.80	57.56	57.84	57.62	57.25	.....
27	56.75	56.65	56.65	56.90	56.95	56.77	56.81	57.54	57.83	57.60	57.25	.....
28	56.75	56.67	56.65	56.90	56.94	56.77	56.81	57.53	57.82	57.58	57.25	.....
29	.....	.....	56.66	56.89	56.93	56.78	56.82	57.54	57.82	57.56	57.23	.....
30	.....	.....	56.66	56.89	56.91	56.78	56.83	57.59	57.82	57.55	57.21	.....
31	.....	.....	56.65	.....	56.90	.....	56.84	57.62	.....	57.54	.....	.....

27-35-16cb. Craig Howard. Drilled unused water-table well, diameter 6 inches, depth 186 feet. Highest water level 145.00 below lsd, Oct. 9, 1951; lowest 175.83 below lsd, Oct. 16, 1941. Records available: 1941-42, 1951. Oct. 9, 145.00; Nov. 28, 174.40.

#### Gray County

1. G. A. Hard. NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 20, T. 25 S., R. 29 W. Drilled unused water-table well in sand and gravel, diameter 5 inches, depth 11 feet. Highest water level 3.41 below lsd, Aug. 29, 1950; lowest 7.56 below lsd, Oct. 8, 1940. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	5.79	Apr. 16	6.26	July 10	4.77	Oct. 22	6.32
Feb. 12	5.64	May 14	6.32	Aug. 20	5.68	Nov. 19	6.15
Mar. 21	5.82	June 26	4.57	Sept. 24	5.98	Dec. 12	6.08

3. N. A. Mans. NE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 28 S., R. 27 W. Drilled unused water-table well in Ogallala formation and deposits of Pleistocene age, diameter 6 inches, depth 201 feet. Highest water level 162.03 below lsd, Dec. 18, 1951; lowest 169.33 below lsd, Sept. 21, 1948. Records available: 1939-51. June 19, 162.45; Sept. 25, 164.13; Dec. 18, 162.03.

11. J. D. Wetmore. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 29 S., R. 28 W. Drilled unused water-table well in deposits of Pleistocene age, diameter 5 inches, depth 61 feet. Highest water level 55.28 below lsd, Dec. 18, 1951; lowest 59.74 below lsd, Aug. 18, 1943. Records available: 1939-51. Mar. 19, 56.30; June 19, 55.98; Sept. 18, 55.41; Dec. 18, 55.28.

#### Greeley County

16-41-20ba. J. Howell. Drilled stock and observation water-table well in Ogallala formation, diameter 6 inches, depth 153 feet. Highest water level 127.96 below lsd, Jan. 6, 1949; lowest 133.02 below lsd, July 20, 1949. Records available: 1947-51. Jan. 9, 130.60; Mar. 29, 130.50; May 29, 130.10; June 19, 130.56; Sept. 27, 130.51; Nov. 6, 130.35.

17-40-22ccd. R. V. Gibson. Drilled observation water-table well in Ogallala formation, diameter 5 inches, depth 150 feet. Highest water level 136.53 below lsd, June 24, 1948; lowest 146.78 below lsd, Nov. 12, 1948. Records available: 1947-51. Jan. 9, 139.00; Mar. 29, 139.25; May 29, 139.44; June 19, 139.15; Sept. 27, 138.03.

18-41-26aa. Aaron Sell. Drilled domestic and observation water-table well in Ogallala formation, diameter 5 inches, depth 114 feet. Highest water level 100.21 below lsd, Sept. 20, 1948; lowest 102.90 below lsd, June 24, 1948. Records available: 1947-51. Jan. 9, 100.48; Mar. 29, 100.40; May 29, 100.49; June 19, 100.43; Sept. 27, 100.46; Nov. 6, 100.33.

19-43-25aad. M. Hall. Drilled observation water-table well in Ogallala formation, diameter 6 inches, depth 101 feet. Highest water level 90.70 below lsd, Aug. 7, 1947; lowest 100.69 below lsd, May 24, 1949. Records available: 1947-51. Jan. 9, 91.42; May 29, 93.34; June 19, 92.07; Sept. 27, 91.20.

#### Hamilton County

2a. Robert Hazlett. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, T. 23 S., R. 43 W. Drilled well, diameter 40 inches, depth 33 feet. Highest water level 12.04 below lsd, June 29, 1951; lowest 15.95 below lsd, Aug. 19, 1948. Records available: 1944-51.

## 2a--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 14	13.58	July 27	12.56	Sept. 28	13.07	Nov. 30	13.35
May 31	12.16	Aug. 24	13.78	Oct. 26	13.16	Dec. 21	13.54
June 29	12.04						

3. B. Rees. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 40 W. Dug and drilled unused water-table well in alluvium, diameter 12 inches, depth 25 feet. Highest water level 11.45 below lsd, May 31, 1951; lowest 14.67 below lsd, Nov. 16, 1939. Records available: 1939-51.

Jan. 26	13.36	Apr. 27	13.77	July 27	11.85	Oct. 26	13.79
Feb. 14	13.55	May 31	11.45	Aug. 28	12.36	Nov. 26	14.04
Mar. 23	13.74	June 28	11.46	Sept. 27	13.40	Dec. 21	14.19

6. Belle Heinlen. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 24, T. 24 S., R. 39 W. Drilled unused water-table well in Dakota sandstone, diameter 5 inches, depth 106 feet. Highest water level 23.70 below lsd, July 27, 1951; lowest 53.90 below lsd, Sept. 14, 1946. Records available: 1939-51.

Jan. 26	42.67	Apr. 27	52.35	July 27	23.70	Oct. 26	24.95
Feb. 14	48.51	May 31	27.89	Aug. 28	23.77	Nov. 26	28.62
Mar. 23	51.33	June 28	24.31	Sept. 27	24.37	Dec. 21	42.97

7. I. E. Martin. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 16, T. 23 S., R. 40 W. Drilled unused water-table well in deposits of Pleistocene age, diameter 4 inches, depth 61 feet. Highest water level 42.25 below lsd, Dec. 2, 1944; lowest 46.00 below lsd, Nov. 27, 1940. Records available: 1939-51. Feb. 14, 44.02; May 31, 44.12; Nov. 26, 44.04.

Harvey County

294. J. B. Schmidt. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 17, T. 22 S., R. 3 W. Drilled unused well in sand and gravel of McPherson formation, diameter 7 inches, depth 97 feet. Records available: 1937-48. Measurement discontinued.

325. A. L. Gouldener. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 19, T. 23 S., R. 3 W. Drilled observation well in coarse gravel and alluvium, diameter 8 inches, depth 26 feet. Highest water level 5.16 below lsd, May 1, 1945; lowest 12.92 below lsd, Apr. 1, 1938. Records available: 1937-51.

Jan. 4	10.05	Apr. 4	10.09	July 9	7.28	Oct. 2	5.92
Feb. 5	10.19	May 3	9.72	Aug. 1	7.17	Nov. 7	6.41
Mar. 1	10.30	June 1	8.23	Sept. 7	6.75	30	6.70

506. W. G. Backhaus. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 28, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 6 inches, depth 139 feet. Highest water level 1.71 below lsd, July 16, 1951; lowest 16.67 below lsd, Oct. 4, 1946. Records available: 1938-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.37	15.09	14.76	15.23	13.66	8.04	6.25	8.52	11.48	9.94	11.95	12.70
2	14.36	15.08	14.65	15.27	12.43	8.45	5.47	8.76	11.53	10.08	12.00	12.73
3	14.35	15.00	14.78	15.31	11.76	8.84	5.59	9.09	11.54	10.27	11.96	12.83
4	14.36	14.98	14.84	15.32	11.88	9.20	5.64	9.34	11.55	10.60	11.96	12.83
5	14.39	14.97	14.89	15.32	12.25	9.49	5.67	9.56	11.49	10.75	11.98	12.86
6	14.42	14.99	15.00	15.24	12.50	9.52	4.68	9.81	10.98	10.76	12.01	12.99
7	14.42	15.01	15.02	15.01	12.72	9.01	....	9.99	10.21	10.44	12.03	13.11
8	14.40	14.97	15.04	14.78	12.72	9.01	....	9.98	9.76	9.71	12.02	13.14
9	14.43	14.99	15.17	14.64	12.81	6.56	5.80	9.71	9.46	9.57	12.07	13.18
10	14.58	14.96	15.18	14.57	12.91	6.31	6.29	8.29	9.50	9.82	12.08	13.18
11	14.60	14.94	15.24	14.54	11.89	6.36	6.37	8.35	9.72	10.05	12.08	13.19
12	14.72	15.00	15.24	14.48	11.39	6.71	5.73	8.71	9.79	10.29	12.05	13.20
13	14.76	15.06	15.24	14.43	11.71	7.34	3.24	8.88	9.62	10.53	12.08	13.20
14	14.78	15.08	15.26	14.41	12.04	....	....	8.88	9.12	10.72	12.08	13.12
15	14.85	15.07	15.26	14.49	12.08	....	....	8.74	8.98	10.81	12.08	13.17
16	14.85	15.05	15.26	14.49	12.04	7.83	1.71	9.02	9.06	11.05	12.16	13.14
17	14.87	15.06	15.33	14.49	11.87	8.25	3.12	9.36	9.06	11.20	12.17	13.09
18	14.89	15.07	15.35	14.49	12.07	8.81	3.74	9.66	9.22	11.39	12.17	13.13
19	14.89	15.07	15.36	14.51	....	9.21	4.33	9.87	9.42	11.41	12.18	13.09
20	14.85	15.08	15.43	14.55	3.46	....	4.74	10.12	9.77	11.46	12.19	13.16
21	14.86	15.08	15.44	14.56	3.46	....	5.24	10.23	10.10	11.64	12.24	13.20
22	14.83	15.04	15.44	14.57	3.45	....	5.70	10.34	10.28	11.76	12.25	13.19
23	14.91	15.00	15.49	14.55	3.45	8.39	5.71	10.41	10.41	11.75	12.61	13.22
24	14.97	14.96	15.50	14.41	3.64	7.75	....	10.53	10.41	11.72	12.62	13.22
25	14.97	14.89	15.49	14.45	4.24	7.65	....	10.66	9.32	11.61	12.57	13.22
26	15.00	14.85	15.49	14.46	....	8.15	5.19	10.73	8.25	11.72	12.57	13.26
27	15.15	14.84	15.48	14.41	....	8.73	6.79	10.78	8.81	11.80	12.56	13.26

## 506--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
28	15.21	14.76	15.41	14.39	.....	9.20	7.23	10.83	9.15	11.85	12.62	13.18
29	15.22		15.41	14.35	.....	9.27	7.60	11.05	9.42	11.85	12.67	13.20
30	15.22		15.46	14.04	.....	7.43	7.97	11.24	9.72	11.88	12.68	13.23
31	15.13		15.27	.....			8.27	11.36		11.89		13.29

507. W. G. Backhaus. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 28, T. 23 S., R. 2 W. Driven observation water-table well in sand, diameter 1 $\frac{1}{4}$  inches, depth 44 feet. Highest water level 3.23 below lsd, May 6, 1944; lowest 15.73 below lsd, Sept. 15, 1947. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	10.77	Apr. 3	10.82	Aug. 1	8.17	Nov. 7	10.70
Feb. 5	12.42	June 1	7.96	Sept. 7	8.72	30	11.29
Mar. 1	11.15	July 9	7.52	Oct. 1	10.44		

701. Dr. V. E. Cheskey. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 3, T. 23 S., R. 1 W. Dug domestic well, depth 45 feet. Records available: 1938-50. Measurement discontinued.

736. I. Ansel, Jr. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SB $\frac{1}{4}$  sec. 12, T. 23 S., R. 3 W. Driven observation and domestic water-table well in fine sand, diameter 1 $\frac{1}{4}$  inches, depth 33 feet. Highest water level 5.25 below lsd, Oct. 2, 1951; lowest 12.08 below lsd, June 28, 1950. Records available: 1950-51. Feb. 3, 1950, 11.12; Apr. 17, 11.50; June 28, 12.08; Oct. 4, 11.22; Jan. 3, 1951, 11.72; Oct. 2, 5.25.

737. C. L. Wilson. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 25, T. 23 S., R. 3 W. Driven observation water-table well in Meade formation, diameter 1 $\frac{1}{4}$  inches, depth 39 feet. Highest water level 10.55 below lsd, July 9, 1951; lowest 18.75 below lsd, June 24, 1939. Records available: 1938-39, 1951. July 9, 10.55. Measurement discontinued.

817. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 1, T. 24 S., R. 2 W. Driven observation water-table well in fine sand, diameter 1 $\frac{1}{4}$  inches, depth 31 feet. Highest water level 1.88 below lsd, Aug. 1, 1951; lowest 17.12 below lsd, Oct. 25, 1940. Records available: 1938-51.

Jan. 4	14.60	June 1	10.85	Aug. 1	1.88	Oct. 2	8.29
Feb. 5	14.94	July 9	9.00	Sept. 7	7.40	Nov. 7	9.61
May 3	14.92						

821. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, T. 24 S., R. 2 W. Driven observation water-table well in coarse sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 24 feet. Highest water level 12.03 below lsd, Aug. 21, 1939; lowest 26.56 below lsd, Oct. 21, 1949. Records available: 1938-51.

Jan. 3	23.20	Apr. 3	23.52	July 9	22.87	Oct. 2	22.84
Feb. 5	19.36	May 3	23.53	Aug. 1	22.89	Nov. 7	22.75
Mar. 1	23.07	June 1	23.06	Sept. 7	22.80	30	22.84

824. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 22, T. 24 S., R. 1 W. Driven observation water-table well in fine sand, diameter 1 $\frac{1}{4}$  inches, depth 42 feet. Highest water level 3.60 below lsd, June 1, 1951; lowest 18.16 below lsd, Nov. 5, 1940. Records available: 1938-51.

Jan. 4	10.39	Apr. 3	10.69	July 9	4.09	Oct. 2	5.62
Feb. 5	10.56	May 3	9.05	Aug. 1	4.99	Nov. 7	6.14
Mar. 1	10.60	June 1	3.60	Sept. 7	7.04	30	6.64

833. T. B. Burrows. Formerly City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 19, T. 24 S., R. 1 W. Drilled observation water-table well in alluvium, diameter 1 $\frac{1}{4}$  inches, depth 57 feet. Highest water level 5.11 below lsd, Oct. 2, 1945; lowest 15.79 below lsd, May 27, 1947. Records available: 1938-51.

Jan. 4	13.78	Apr. 3	14.65	July 9	9.40	Oct. 2	8.81
Feb. 5	14.46	May 3	13.68	Aug. 1	8.81	Nov. 7	9.38
Mar. 1	14.45	June 1	10.94	Sept. 7	9.50	30	10.01

839. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Drilled observation water-table well in sand, diameter 1 $\frac{1}{4}$  inches, depth 27 feet. Highest water level 10.62 below lsd, Aug. 21, 1939; lowest 20.34 below lsd, Apr. 3 and May 3, 1951. Records available: 1938-51.

Jan. 4	19.95	Apr. 3	20.34	July 9	17.16	Oct. 2	17.45
Feb. 5	20.04	May 3	20.34	Aug. 1	17.57	Nov. 7	17.31
Mar. 1	20.15	June 1	18.38	Sept. 7	18.23	30	17.41

853. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 13, T. 24 S., R. 2 W. Drilled observation water-table well in medium sand, diameter 1 $\frac{1}{4}$  inches, depth 37 feet. Highest water level 5.82 below lsd, Oct. 2, 1951; lowest 11.97 below lsd, June 29, 1950. Records available: 1938-51.

## 853--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	11.65	Apr. 3	11.95	July 9	6.25	Oct. 2	5.82
Feb. 5	11.85	May 3	10.29	Aug. 1	6.61	Nov. 7	7.06
Mar. 1	11.80	June 1	7.85	Sept. 7	6.55	30	7.57

854. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 23, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{2}$  inches, depth 32 feet. Highest water level 5.13 below lsd, Aug. 1, 1951; lowest 14.87 below lsd, Nov. 1, 1940. Records available: 1938-51.

Jan. 4	10.97	May 3	8.27	Aug. 1	5.13	Nov. 7	5.69
Feb. 5	10.97	June 1	6.26	Sept. 7	5.72	30	6.59
Mar. 1	11.10	July 9	5.22	Oct. 2	8.85		

872. D. C. Buller. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 31, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{2}$  inches, depth 31 feet. Highest water level 17.65 below lsd, Mar. 11, 1939; lowest 35.37 below lsd, Oct. 2, 1951. Records available: 1938-51.

Jan. 4	33.98	Apr. 3	34.70	July 9	34.60	Oct. 2	35.37
Feb. 5	33.03	May 3	33.17	Aug. 1	34.68	Nov. 7	33.15
Mar. 1	31.91	June 1	34.25	Sept. 7	33.20	30	35.26

873. City of Wichita. SE $\frac{1}{4}$  sec. 31, T. 23 S., R. 2 W. Drilled test well, diameter 1 $\frac{1}{4}$  inches, depth 63 feet in sand and gravel. Records available: 1938-49. Measurement discontinued.

874. City of Wichita. SE $\frac{1}{4}$  sec. 31, T. 23 S., R. 2 W. Drilled test well, diameter 1 $\frac{1}{4}$  inches, depth 201 feet. Records available: 1938-49. Measurement discontinued.

875. A. B. Havely. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 17, T. 23 S., R. 3 W. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{2}$  inches, depth 13 feet. Highest water level 0.27 above lsd, Sept. 7, 1951; lowest 6.19 below lsd, Jan. 12, 1950. Records available: 1939-51.

Jan. 3	-3.44	Apr. 4	-2.49	July 9	-0.10	Oct. 2	+0.12
Feb. 5	-3.52	May 3	-.70	Aug. 1	-.70	Nov. 7	-.10
Mar. 1	-3.46	June 1	-.07	Sept. 7	.+27	30	-.26

876. A. B. Havely. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 17, T. 23 S., R. 3 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 246 feet. Highest water level 21.55 below lsd, Sept. 7, 1951; lowest 27.83 below lsd, Nov. 8, 1940. Records available: 1939-51.

Jan. 3	25.21	Apr. 4	25.49	July 9	22.89	Oct. 1	22.12
Feb. 5	25.42	May 3	25.07	Aug. 1	22.48	Nov. 30	22.10
Mar. 1	25.51	June 1	23.89	Sept. 7	21.55		

877. A. B. Havely. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 17, T. 23 S., R. 3 W. Drilled observation water-table well in sand and gravel, diameter 6 inches, depth 47 feet. Highest water level 9.95 below lsd, May 6, 1945; lowest 14.95 below lsd, Jan. 27, 28, 1941. Records available: 1939-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	13.62	13.86	13.95	13.93	13.51	....	11.77	11.27	11.11	....	10.55	10.68
2	13.62	13.86	13.94	13.92	13.55	12.21	11.74	11.28	11.13	....	10.58	10.65
3	13.62	13.83	13.96	13.92	13.53	12.22	11.77	11.35	11.14	10.43	10.53	10.68
4	13.65	13.84	13.96	13.89	....	12.23	11.56	11.36	11.16	10.54	10.52	10.68
5	13.71	13.84	13.96	13.88	13.47	12.22	11.54	11.36	11.14	10.58	10.54	10.66
6	13.73	13.88	13.98	13.83	13.47	12.19	11.48	11.38	11.08	10.54	10.55	10.76
7	13.73	13.89	13.98	13.83	13.47	12.07	11.46	11.38	11.06	10.54	10.55	10.83
8	13.72	13.89	14.00	13.82	13.44	12.07	11.43	11.38	10.97	10.47	10.53	10.87
9	13.68	13.91	14.02	13.80	13.40	12.07	11.38	11.23	10.92	10.45	10.53	10.87
10	13.72	13.90	14.01	13.78	13.37	12.07	11.39	11.22	10.88	10.39	10.53	10.85
11	13.72	13.90	14.04	13.77	13.39	12.05	11.39	11.19	10.87	10.35	10.53	10.82
12	13.74	13.92	14.04	13.77	13.38	12.01	11.35	11.16	10.83	10.30	10.46	10.78
13	13.75	13.98	14.03	13.76	13.38	12.01	11.32	11.15	10.76	10.32	10.49	10.80
14	13.75	13.98	14.02	13.75	13.38	12.01	11.30	11.06	10.75	10.32	10.50	10.94
15	13.78	13.97	13.98	13.77	13.38	12.01	11.25	11.02	10.70	10.32	10.61	10.94
16	13.78	13.92	....	13.77	13.28	12.00	11.22	11.02	10.67	10.32	10.64	10.92
17	13.75	13.92	14.01	13.76	13.15	12.02	11.22	11.01	10.63	10.40	10.64	10.91
18	13.76	13.92	14.04	13.73	....	12.02	11.22	11.02	10.59	10.41	10.64	10.91
19	13.78	13.94	14.04	13.74	12.92	12.02	11.22	11.02	10.57	10.50	10.60	10.86
20	13.86	13.98	14.04	13.73	12.88	....	11.21	11.04	10.54	10.44	10.59	10.96
21	13.86	13.98	14.04	13.72	12.76	....	11.22	11.04	10.59	10.43	10.54	10.98
22	13.82	13.98	14.03	13.75	12.70	....	11.26	11.04	10.59	10.44	10.57	11.05
23	13.82	13.98	14.07	13.74	12.59	11.97	11.23	11.04	10.59	10.51	10.59	11.07

877--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
24	13.84	13.97	14.08	13.70	12.48	11.95	11.21	11.04	10.59	10.51	10.62	11.07
25	13.84	13.94	14.06	13.72	12.40	11.94	11.20	11.03	10.54	10.55	10.65	11.17
26	13.81	13.92	14.06	13.72	12.34	11.91	11.20	11.04	10.50	10.56	10.66	11.19
27	13.84	13.94	14.04	13.71	12.34	11.91	11.20	11.03	10.55	10.55	10.66	11.16
28	13.87	13.95	13.95	13.70	12.33	11.92	11.20	11.03	....	10.54	10.66	11.05
29	13.88		13.95	13.65	12.32	11.92	11.22	11.06	....	10.51	10.67	11.01
30	13.88		13.95	13.63	12.31	11.80	11.23	11.06	....	10.52	10.70	11.00
31	13.85		13.95	....		11.25	11.11			10.53		11.13

878. C. Cadwell.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 1, T. 24 S., R. 3 W. Driven observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 45 feet. Highest water level 16.25 below lsd, June 3, 1940; lowest 34.55 below lsd, Nov. 7, 1951. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	27.92	May 3	28.03	Aug. 1	27.60	Nov. 7	34.55
Feb. 5	27.90	June 1	27.82	Sept. 7	30.83	30	29.69
Mar. 1	27.96	July 9	27.67	Oct. 2	30.81		

879. C. Cadwell.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 1, T. 24 S., R 3 W. Drilled observation water-table well in sand, diameter  $1\frac{1}{4}$  inches, depth 241 feet. Highest water level 17.52 below lsd, May 27 and June 3, 1940; lowest 31.07 below lsd, May 3, 1951. Records available: 1938-51.

Jan. 3	30.20	May 3	31.07	Aug. 1	30.58	Nov. 7	27.19
Feb. 5	30.63	June 1	30.68	Sept. 7	27.33	30	27.27
Mar. 1	30.76	July 9	30.56	Oct. 2	27.31		

880. Peter Miller.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 11, T. 24 S., R. 3 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 15 feet. Highest water level 2.56 below lsd, Sept. 30, 1945; lowest 9.03 below lsd, Mar. 1, 1951. Records available: 1938-51.

Jan. 4	8.85	Apr. 3	8.95	July 9	6.71	Nov. 7	6.45
Feb. 5	8.97	May 3	8.13	Aug. 1	6.46	30	6.62
Mar. 1	9.03	June 1	6.46	Oct. 2	6.05		

881. Peter Miller.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 11, T. 24 S., R. 3 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 57 feet. Highest water level 3.23 below lsd, Sept. 30, 1945; lowest 8.80 below lsd, Mar. 1, 1951. Records available: 1938-51.

Jan. 3	8.60	May 3	8.46	Aug. 1	5.92	Nov. 7	6.00
Feb. 5	8.74	June 1	5.73	Oct. 2	5.79	30	6.22
Mar. 1	8.80	July 9	4.92				

883. Maggie Holle. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 38 feet. Highest water level 13.35 below lsd, Aug. 21, 1939; lowest 25.07 below lsd, June 6, 1950. Records available: 1939-51.

Jan. 4	23.85	Apr. 3	24.89	July 9	23.82	Oct. 2	22.54
Feb. 5	23.92	May 3	24.88	Aug. 1	22.31	Nov. 7	21.42
Mar. 1	24.20	June 1	23.61	Sept. 7	22.07	30	21.72

884. Maggie Holle. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 60 feet. Highest water level 13.34 below lsd, Aug. 21, 1939; lowest 25.19 below lsd, Apr. 3, 1951. Records available: 1939-51. Jan. 4, 23.97; Apr. 3, 25.19; July 9, 23.50; Oct. 2, 24.99.

885. Maggie Holle. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 99 feet. Highest water level 13.22 below lsd, Aug. 21, 1939; lowest 25.29 below lsd, July 2, 1951. Records available: 1939-51. Jan. 4, 23.80; Apr. 3, 24.76; July 2, 25.29; Oct. 2, 22.34.

886. F. H. Haiber. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 57 feet. Highest water level 2.34 below lsd, Aug. 21, 1939; lowest 21.02 below lsd, May 3, 1951. Records available: 1939-51.

Jan. 4	18.84	Apr. 3	20.52	July 9	19.60	Oct. 1	19.55
25	19.47	25	19.78	25	18.65	25	19.06
Feb. 5	18.98	May 3	21.02	Aug. 1	19.59	Nov. 7	19.02
27	19.90	26	20.06	25	18.51	26	18.20
Mar. 3	20.52	June 1	20.09	Sept. 7	18.62	30	18.58
26	19.18	25	18.23	26	19.31	Dec. 27	18.58

887. F. H. Haiber. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 111 feet. Highest water level 2.72 below lsd, May 27, 1940; lowest 25.24 below lsd, Nov. 7, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	19.51	Apr. 3	21.58	July 9	21.14	Oct. 2	21.15
Feb. 5	19.66	May 3	21.97	Aug. 1	21.15	Nov. 7	25.24
Mar. 1	21.07	June 1	21.31	Sept. 7	19.75	30	19.67

888. C. K. Ellis. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 17, T. 23 S., R. 2 W. Drilled observation water-table well in medium sand, diameter 1 $\frac{1}{4}$  inches, depth 12 feet. Highest water level 0.35 above lsd, Nov. 7, 1951; lowest 8.95 below lsd, Oct. 27, 1939. Records available: 1939-51. Jan. 3, 5.91; Feb. 5, 6.15; Mar. 1, 5.19; Aug. 1, 2.35; Nov. 7, +0.35; Nov. 30, +0.30.

889. C. K. Ellis. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 17, T. 23 S., R. 2 W. Drilled observation water-table well in medium sand, diameter 1 $\frac{1}{4}$  inches, depth 151 feet. Highest water level 0.62 below lsd, Aug. 1, 1951; lowest 9.04 below lsd, June 29, 1950. Records available: 1939-51. Jan. 3, 6.79; Feb. 5, 7.47; Mar. 1, 6.68; Aug. 1, 0.62; Nov. 7, 3.06; Nov. 30, 3.58.

890. J. F. Jorgenson. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 21, T. 24 S., R. 3 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 14 feet. Highest water level 0.10 below lsd, May 2, 1945; lowest 7.07 below lsd, Nov. 5, 1940. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	4.90	Apr. 4	4.79	July 10	1.09	Oct. 2	1.10
Feb. 5	5.04	May 3	4.04	Aug. 1	1.95	Nov. 7	1.38
Mar. 1	4.89	June 1	1.90	Sept. 7	.80	30	1.77

891. Arthur McMurry. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 31, T. 24 S., R. 3 W. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 7 feet. Highest water level 0.46 below lsd, May 11, 1942; lowest 4.68 below lsd, Sept. 26, 1946. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	4.24	Apr. 4	2.81	July 9	0.97	Oct. 2	2.39
Feb. 5	4.27	May 3	1.82	Aug. 1	2.28	Nov. 7	2.52
Mar. 1	2.72	June 1	1.14	Sept. 8	1.09	30	2.73

892. Arthur McMurry. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 31, T. 24 S., R. 3 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 106 feet. Highest water level 0.09 below lsd, Sept. 7, 1951; lowest 3.92 below lsd, Oct. 3, 1940. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	2.43	Apr. 4	2.02	July 9	0.12	Oct. 2	1.44
Feb. 5	2.52	May 3	1.09	Aug. 1	1.37	Nov. 7	1.56
Mar. 1	2.88	June 1	.29	Sept. 7	.09	30	2.81

893. Arthur McMurry. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 31, T. 24 S., R. 3 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 163 feet. Highest water level 0.48 above lsd, July 9, 1951; lowest 3.77 below lsd, Nov. 5, 1940. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	-2.20	Apr. 4	-1.91	July 9	+0.48	Oct. 2	-0.88
Feb. 5	-2.30	May 3	-.88	Aug. 1	-.57	Nov. 7	-1.32
Mar. 1	-1.99	June 1	+.33	Sept. 8	-.47	30	-2.42

894. H. A. Lawrence. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 59 feet. Highest water level 9.56 below lsd, May 27, 1940; lowest 24.16 below lsd, May 4, 1948. Records available: 1938-51. Nov. 30, 24.14.

895. H. A. Lawrence. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 24 S., R. 2 W. Drilled well, diameter 1 $\frac{1}{4}$  inches, depth 238 feet. Records available: 1938-49. Measurement discontinued.

1053-B. J. H. Workentine. SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 16, T. 23 S., R. 3 W. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches. Highest water level 6.67 below lsd, July 9, 1951; lowest 12.67 below lsd, Apr. 17, 1951. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3, 1950	12.45	Apr. 17, 1950	12.67	Jan. 3, 1951	12.10	July 9, 1951	6.67
Mar. 25	7.89	Oct. 4	10.51	Apr. 3	10.83	Oct. 2	6.92

1173. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 29, T. 24 S., R. 2 W. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 26 feet. Highest water level 10.64 July 9, 1951; lowest 16.53 below lsd, Apr. 3, 1951. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3, 1950	14.23	June 29, 1950	15.86	Jan. 4, 1951	16.02	July 9, 1951	10.64
Apr. 17	15.32	Oct. 4	14.54	Apr. 3	16.53	Oct. 2	10.84

1175. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 30, T. 24 S., R. 1 W. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 32 feet. Highest water level 3.80 below lsd, July 9, 1951; lowest 12.01 below lsd, Apr. 3, 1951. Records available: 1950-51.

1175--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3, 1950	10.74	June 29, 1950	11.96	Jan. 4, 1951	11.39	July 9, 1951	3.80
Apr. 17	11.41	Oct. 4	9.68	Apr. 3	12.01	Oct. 2	4.40

1179. City of Wichita.  $SE_4^1NW_4^1SE_4^1$  sec. 33, T. 24 S., R. 1 W. Driven observation water-table well in sand and gravel, diameter  $1\frac{1}{2}$  inches, depth 32 feet. Highest water level 8.25 below lsd, Oct. 2, 1951; lowest 17.04 below lsd, Apr. 17, 1950. Records available: 1950-51. Feb. 3, 1950, 16.51; Apr. 17, 17.04; June 30, 17.03; Oct. 4, 15.16; Jan. 4, 1951, 16.09; Apr. 3, 16.36; Oct. 2, 8.25.

1186. City of Wichita.  $SW_4^1SW_4^1$  sec. 13, T. 24 S., R. 2 W. Driven observation water-table well in sand and gravel and alluvium, diameter  $1\frac{1}{2}$  inches, depth 21 feet. Highest water level 5.25 below lsd, Sept. 7, 1951; lowest 13.88 below lsd, Dec. 15, 1947. Records available: 1941-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	13.53	Apr. 3	13.72	July 9	10.08	Oct. 2	10.53
Feb. 5	13.64	May 3	12.55	Aug. 1	11.01	Nov. 7	10.91
Mar. 1	13.69	June 1	11.12	Sept. 7	5.25	30	11.16

1187. City of Wichita.  $NW_4^1NW_4^1$  sec. 29, T. 24 S., R. 1 W. Driven observation water-table well in sand and gravel, diameter  $1\frac{1}{2}$  inches, depth 39 feet. Highest water level 2.30 below lsd, July 9, 1951; lowest 10.44 below lsd, Dec. 5, 1947. Records available: 1941-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	9.90	Apr. 3	10.09	July 9	2.30	Oct. 2	3.79
Feb. 5	10.21	May 3	7.16	Aug. 1	2.89	Nov. 7	5.09
Mar. 1	10.02	June 1	4.05	Sept. 7	9.44	30	6.73

1189. City of Wichita.  $SW_4^1SW_4^1$  sec. 16, T. 24 S., R. 2 W. Driven observation water-table well in sand, gravel, and alluvium, diameter  $1\frac{1}{2}$  inches, depth 21 feet. Highest water level 6.50 below lsd, Apr. 26, 1942; lowest 16.40 below lsd, Jan. 4, 1951. Records available: 1949-51. Jan. 4, 16.40; July 9, 12.54; Oct. 2, 14.22.

1190. City of Wichita.  $SE_4^1SE_4^1$  sec. 10, T. 24 S., R. 2 W. Driven observation water-table well in sand and gravel, diameter  $1\frac{1}{2}$  inches, depth 27 feet. Highest water level 14.14 below lsd, July 9, 1951; lowest 20.67 below lsd, Apr. 3, 1951. Records available: 1950-51. Feb. 3, 1950, 18.71; Apr. 17, 19.36; June 29, 20.13; Jan. 4, 1951, 20.13; Apr. 3, 20.67; July 9, 14.14, Oct. 2, 16.78.

1191. City of Wichita.  $SW_4^1$  sec. 27, T. 23 S., R. 2 W. Driven observation water-table well in alluvium, diameter  $1\frac{1}{4}$  inches, depth 27 feet. Highest water level 10.09 below lsd, Oct. 4, 1950; lowest 14.40 below lsd, June 29, 1950. Records available: 1950-51. Feb. 3, 1950, 13.08; Apr. 17, 13.27; June 29, 14.40; Oct. 4, 10.09; Jan. 3, 1951, 11.87; Apr. 3, 13.51; Nov. 30, 10.80.

1193. J. W. McElwain.  $SE_4^1NE_4^1NE_4^1$  sec. 24, T. 23 S., R. 3 W. Driven stock and observation water-table well in sand, diameter  $1\frac{1}{4}$  inches, depth 23 feet. Highest water level 11.03 below lsd, Feb. 3, 1950; lowest 11.68 below lsd, June 28, 1950. Records available: 1950-51. Feb. 3, 1950, 11.03; Apr. 17, 11.24; June 28, 11.68; Jan. 3, 1951, 11.24; Apr. 3, 11.60.

2072. Peter Hoops and others.  $NE_4^1NW_4^1$  sec. 5, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 3 inches, depth 46 feet. Highest water level 27.09 below lsd, May 5, 1947; lowest 37.35 below lsd, May 3 and June 1, 1951. Records available: 1941-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	37.20	Apr. 3	37.31	July 9	37.26	Oct. 2	37.09
Feb. 5	37.29	May 3	37.35	Aug. 1	37.20	Nov. 7	37.05
Mar. 1	37.26	June 1	37.35	Sept. 7	37.12	30	37.02

2084. Mrs. Emma Linn Webster.  $SE_4^1$  sec. 15, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 6 inches, depth 30 feet. Highest water level 2.79 below lsd, Oct. 2, 1951; lowest 13.78 below lsd, Oct. 4, 1950. Records available: 1950-51. Feb. 3, 1950, 9.56; Apr. 17, 10.27; Oct. 4, 13.78; Jan. 4, 1951, 13.70; Apr. 3, 13.77; July 9, 3.62; Oct. 2, 2.79.

2088. City of Wichita.  $NW_4^1NW_4^1NW_4^1$  sec. 22, T. 24 S., R. 2 W. Driven observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 18 feet. Highest water level 3.90 below lsd, Apr. 28, 1944; lowest 13.08 below lsd, Jan. 4, 1951. Records available: 1944-46, 1949-51.

## 2088--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 25, 1949	6.15	Apr. 17, 1950	11.50	Oct. 4, 1950	10.88	Apr. 3, 1951	12.97
Oct. 13	9.11	June 29	12.37	Jan. 4, 1951	13.08	Oct. 2	9.80
Feb. 3, 1950	10.65						

3001. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 30, T. 23 S., R. 2 W. Driven observation water-table well in McPherson formation, diameter 1 $\frac{1}{2}$  inches. Records available: 1951. Nov. 30, 23.07.

3002. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 30, T. 24 S., R. 2 W. Driven water-table well in McPherson formation, diameter 1 $\frac{1}{4}$  inches, depth 20 feet. Highest water level 0.82 above lsd, July 9, 1951; lowest 4.47 below lsd, Apr. 3, 1951. Records available: 1950-51.

Feb. 3, 1950	2.98	June 29, 1950	4.39	Jan. 4, 1951	4.00	July 9	0.82
Apr. 17	3.63	Oct. 4	2.99	Apr. 3	4.47	Oct. 2	+.13

3003. City of Wichita. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 24 S., R. 2 W. Driven observation water-table well in McPherson formation, diameter 1 $\frac{1}{2}$  inches, depth 20 feet. Highest water level 0.67 below lsd, July 9, 1951; lowest 5.49 below lsd, June 29, 1950. Records available: 1950-51. Records available: 1950-51.

Feb. 3, 1950	4.40	June 29, 1950	5.49	Jan. 4, 1951	4.46	July 9, 1951	0.67
Apr. 17	4.81	Oct. 4	3.34	Apr. 3	4.50	Oct. 2	1.28

3005. Sally McFarland and others. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 28, T. 23 S., R. 2 W. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches. Records available: 1951. Nov. 30, 43.68.

3031. City of Wichita. NE $\frac{1}{4}$  sec. 24, T. 24 S., R. 3 W. Driven observation water-table well in McPherson formation, diameter 1 $\frac{1}{4}$  inches. Highest water level 9.82 below lsd, Oct. 2, 1951; lowest 13.97 below lsd, Apr. 3, 1951. Records available: 1950-51.

Jan. 12, 1950	12.22	June 6, 1950	13.30	Dec. 1, 1950	13.31	May 3, 1951	13.52
Feb. 2	12.47	29	13.52	Jan. 4, 1951	13.63	June 1	10.94
3	12.47	Sept. 1	12.69	Feb. 5	13.80	Oct. 2	9.82
Mar. 31	12.88	Oct. 3	12.64	Mar. 1	13.94	Nov. 7	10.46
May 4	13.21	Nov. 1	13.03	Apr. 3	13.97	30	10.75

3032. City of Wichita. SW $\frac{1}{4}$  sec. 24, T. 24 S., R. 2 W. Driven observation water-table well in McPherson formation, diameter 1 $\frac{1}{4}$  inches, depth 24 feet. Highest water level 13.03 below lsd, Nov. 7, 1951; lowest 16.83 below lsd, May 3, 1951. Records available: 1950-51.

Jan. 12, 1950	14.38	Aug. 4, 1950	15.62	Feb. 5, 1951	16.44	July 9, 1951	14.35
Feb. 2	14.54	Sept. 1	15.49	Mar. 1	16.59	Aug. 1	13.86
Mar. 31	15.18	Oct. 3	15.50	Apr. 3	16.81	Oct. 2	13.40
May 4	15.29	Nov. 1	15.75	May 3	16.83	Nov. 7	13.03
June 6	16.69	Dec. 1	15.98	June 1	15.36	30	13.40
29	15.88	Jan. 4, 1951	13.22				

3033. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 24 S., R. 2 W. Driven observation water-table well in McPherson formation, diameter 1 $\frac{1}{2}$  inches, depth 45 feet. Highest water level 13.77 below lsd, Aug. 1, 1951; lowest 18.30 below lsd, June 29, 1950. Records available: 1950-51.

Jan. 12, 1950	16.23	Aug. 4, 1950	17.06	Feb. 5, 1951	17.38	July 9, 1951	13.84
Feb. 2	16.72	Sept. 1	16.83	Mar. 1	17.61	Aug. 1	13.77
Mar. 31	16.77	Oct. 3	16.16	Apr. 3	17.92	Oct. 2	14.01
May 4	17.31	Nov. 1	17.16	May 3	17.02	Nov. 7	14.16
June 6	17.70	Dec. 1	16.88	June 1	14.89	30	14.68
29	18.30	Jan. 4, 1951	16.81				

3035. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 34, T. 23 S., R. 3 W. Drilled observation water-table well in McPherson formation, diameter 1 $\frac{1}{4}$  inches, depth 28 feet. Highest water level 8.16 below lsd, Nov. 1, 1950; lowest 13.19 below lsd, Oct. 4, 1950. Records available: 1950-51.

Jan. 12, 1950	9.50	Aug. 4, 1950	12.60	Feb. 5, 1951	10.37	July 9, 1951	12.25
Feb. 2	9.64	Sept. 1	12.62	Mar. 1	10.77	Aug. 1	12.34
Mar. 31	10.98	Oct. 4	13.19	Apr. 3	11.33	Sept. 7	12.43
May 4	11.52	Nov. 1	8.16	May 3	11.71	Oct. 2	12.45
June 6	11.93	Dec. 1	8.92	June 1	11.99	Nov. 7	12.46
28	12.17	Jan. 3, 1951	9.71			30	12.44

3036. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 23, T. 23 S., R. 3 W. Drilled observation water-table well in McPherson formation, diameter 1 $\frac{1}{4}$  inches, depth 40 feet. Highest water level 15.25 below lsd, Oct. 2, 1951; lowest 19.67 below lsd, Apr. 3, 1951. Records available: 1950-51.

3036--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2, 1950	18.73	Sept. 1, 1950	19.07	Mar. 1, 1951	19.27	Aug. 1, 1951	16.79
Mar. 31	18.51	Oct. 4	18.67	Apr. 3	19.67	Sept. 7	15.83
May 4	18.78	Nov. 1	18.88	May 3	19.43	Oct. 2	15.25
June 6	19.12	Dec. 1	18.90	June 1	17.98	Nov. 7	15.42
29	19.37	Feb. 5, 1951	19.33	July 9	17.15	30	15.65
Aug. 4	19.33						

3037. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 5, T. 24 S., R. 2 W. Drilled observation water-table well in McPherson formation, diameter 1 $\frac{1}{4}$  inches, depth 70 feet. Highest water level 38.38 below lsd, Jan. 2, 1951; lowest 44.54 below lsd, June 29, 1950. Records available: 1950-51.

Jan. 12, 1950	40.39	Sept. 1, 1950	42.95	Mar. 1, 1951	40.29	Aug. 1, 1951	40.22
Feb. 2	43.49	Oct. 3	41.53	Apr. 3	43.18	Sept. 7	42.25
Mar. 31	40.95	Nov. 1	41.54	May 3	43.26	Oct. 2	44.25
June 6	42.09	Dec. 1	41.63	June 1	39.77	Nov. 7	42.51
29	44.54	Jan. 2, 1951	38.38	July 9	41.74	30	42.35
Aug. 4	43.07	Feb. 5	42.03				

3038. Sally McFarland and others. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 33, T. 23 S., R. 2 W. Drilled observation water-table well in McPherson formation, diameter 1 $\frac{1}{2}$  inches, depth 70 feet. Highest water level 36.04 below lsd, Jan. 3, 1951; lowest 42.62 below lsd, June 29, 1950. Records available: 1950-51.

Feb. 2, 1950	39.66	Sept. 1, 1950	39.80	Mar. 1, 1951	37.92	Aug. 1, 1951	36.58
Mar. 31	37.94	Oct. 3	38.38	Apr. 3	40.86	Sept. 7	38.75
May 4	37.49	Nov. 1	39.13	May 3	40.70	Oct. 2	40.81
June 6	39.62	Dec. 1	38.31	June 1	36.57	Nov. 7	41.41
29	42.62	Jan. 3, 1951	36.04	July 9	37.63	30	39.94
Aug. 4	40.79	Feb. 5	39.09				

3039. George Lehman. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 34, T. 23 S., R. 2 W. Drilled observation water-table well in McPherson formation, diameter 1 $\frac{1}{4}$  inches, depth 30 feet. Highest water level 0.1 above lsd, Sept. 7, 1951; lowest 17.52 below lsd, May 4, 1950. Records available: 1950-51.

Jan. 12, 1950	-6.63	Aug. 4, 1950	-8.47	Feb. 5, 1951	-8.73	Aug. 1, 1951	-1.17
Feb. 2	6.88	Sept. 1	8.25	Mar. 1	8.89	Sept. 7	+1
Mar. 31	7.38	Oct. 3	8.18	Apr. 3	9.10	Oct. 2	-0.05
May 4	17.52	Nov. 1	8.20	May 3	8.67	Nov. 7	.77
June 6	7.93	Dec. 1	8.36	June 1	1.20	30	1.33
29	8.40	Jan. 3, 1951	8.56	July 9	.09		

M-1. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 222 feet. Highest water level 18.56 below lsd, Apr. 13, 1939; lowest 104.00 below lsd, Jan. 3, Feb. 5, June 30, 1950. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	101.0	Apr. 2	102.0	July 2	32.0	Oct. 1	90.0
Feb. 1	100.0	30	38.0	31	99.0	Nov. 2	32.0
28	30.0	May 31	96.0	Aug. 31	89.0	30	97.5

M-1a. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 71 feet. Highest water level 17.47 below lsd, June 3, 1940; lowest 42.36 below lsd, June 30, 1950. Records available: 1939-51.

Jan. 2	37.47	Apr. 2	40.46	July 2	29.18	Oct. 1	34.10
Feb. 1	37.43	30	34.42	31	36.36	Nov. 2	28.27
28	26.69	May 31	35.64	Aug. 31	31.06	30	36.54

M-1b. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 69 feet. Highest water level 15.94 below lsd, June 3, 1940; lowest 39.80 below lsd, June 30, 1950. Records available: 1939-51.

Jan. 2	34.74	Apr. 2	39.03	July 2	28.16	Oct. 1	32.11
Feb. 1	34.78	30	33.20	31	33.94	Nov. 2	27.24
28	25.57	May 31	33.21	Aug. 31	28.20	30	34.18

M-2. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches; depth 234 feet. Highest water level 18.33 below lsd, May 4, 1939; lowest 155.00 below lsd. Sept. 2, 1949. Records available: 1939-51.

## M-2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	39.0	Apr. 2	47.0	July 2	91.0	Oct. 1	91.0
Feb. 1	46.0	30	43.0	31	39.0	Nov. 2	96.0
28	39.0	May 31	44.0	Aug. 31	90.0	30	43.0

M-2a. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 67 feet. Highest water level 17.84 below lsd, June 3, 1940; lowest 41.44 below lsd, June 30, 1950. Records available: 1939-51.

Jan. 2	34.93	Apr. 2	39.29	July 2	33.38	Oct. 1	37.12
Feb. 1	36.76	30	36.25	31	35.03	Nov. 2	33.00
28	29.09	May 31	33.83	Aug. 31	34.31	30	35.86

M-2b. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 68 feet. Highest water level 20.25 below lsd, May 27, 1940; lowest 45.02 below lsd, Feb. 5, 1950. Records available: 1939-51.

Jan. 2	34.90	Apr. 2	40.57	July 2	37.23	Oct. 1	42.19
Feb. 1	39.22	30	40.58	31	35.89	Nov. 2	37.89
28	34.21	May 31	34.00	Aug. 31	39.63	30	37.23

M-2c. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Driven and drilled observation water-table well in McPherson formation, diameter 1 $\frac{1}{4}$  inches. Highest water level 29.35 below lsd, Feb. 28, 1951; lowest 41.32 below lsd, June 30, 1950. Records available: 1946-51.

Jan. 2	34.23	Apr. 2	39.22	July 2	35.79	Oct. 1	33.62
Feb. 1	34.99	30	37.80	31	35.70	Nov. 2	34.00
28	29.35	May 31	33.68	Aug. 31	33.26	30	34.59

M-3. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 238 feet. Highest water level 23.20 below lsd, May 8, 1939; lowest 111.50 below lsd, Sept. 2, 1949. Records available: 1939-51.

Jan. 2	35.5	Apr. 2	94.5	July 2	95.0	Oct. 1	90.0
Feb. 1	45.0	30	92.0	31	38.0	Nov. 2	46.0
28	41.0	May 31	85.0	Aug. 31	92.0	30	92.0

M-3a. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 66 feet. Highest water level 19.93 below lsd, May 27, 1940; lowest 48.07 below lsd, Oct. 1, 1951. Records available: 1939-51.

Jan. 2	33.43	Apr. 2	45.83	July 2	44.04	Oct. 1	48.07
Feb. 1	40.80	30	43.44	31	35.42	Nov. 2	41.68
28	36.84	May 31	35.24	Aug. 31	47.60	30	41.93

M-3b. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 97 feet. Highest water level 23.13 below lsd, May 27, 1940; lowest 52.42 below lsd, Oct. 1, 1951. Records available: 1939-51.

Jan. 2	36.66	Apr. 2	49.17	July 2	46.66	Oct. 1	52.42
Feb. 1	44.76	30	47.69	31	38.67	Nov. 2	45.63
28	41.01	May 31	39.13	Aug. 31	51.76	30	45.49

M-4. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 30, T. 23 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 234 feet. Highest water level 23.12 below lsd, May 27, 1940; lowest 94.63 below lsd, July 10, 1947. Records available: 1939-51.

Jan. 2	39.0	Apr. 2	44.5	July 2	44.5	Oct. 1	90.0
Feb. 1	47.0	30	46.0	31	39.0	Nov. 2	49.0
28	43.0	May 31	38.0	Aug. 31	49.0	30	45.0

M-4a. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 30, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 69 feet. Highest water level 22.87 below lsd, May 27, 1940; lowest 51.93 below lsd, Oct. 3, 1948. Records available: 1939-51.

Jan. 2	36.67	Apr. 2	43.36	July 2	42.91	Oct. 1	49.27
Feb. 1	43.28	30	43.48	31	38.24	Nov. 2	43.33
28	39.34	May 31	36.05	Aug. 31	45.78	30	40.45

M-4b. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 30, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 69 feet. Highest water level 23.91 below lsd, May 27, 1940; lowest 48.91 below lsd, Feb. 5, 1950. Records available: 1939-51.

Jan. 2	37.43	Apr. 2	43.63	July 2	41.96	Oct. 1	48.50
Feb. 1	43.39	30	43.65	31	38.83	Nov. 2	43.27
28	39.65	May 31	36.80	Aug. 31	45.56	30	40.83

M-5. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 23 S., R. 2 W. Drilled public-supply water-table well in sand and gravel, diameter 18 inches, depth 237 feet. Highest water level 20.33 below lsd, May 16, 1939; lowest 132.5 below lsd, Aug. 1, 1950. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	38.0	Apr. 2	36.0	July 2	40.0	Oct. 1	108.0
Feb. 1	110.0	30	108.0	31	40.0	Nov. 2	117.5
28	105.0	May 31	34.0	Aug. 31	106.0	30	40.0

M-5a. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 71 feet. Highest water level 17.79 below lsd, June 3, 1940; lowest 42.06 below lsd, Sept. 30, 1949. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	32.90	Apr. 2	33.90	July 2	31.92	Oct. 1	34.58
Feb. 1	33.38	30	32.79	31	33.39	Nov. 2	32.65
28	31.28	May 31	32.94	Aug. 31	32.84	30	33.93

M-5b. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 59 feet. Highest water level 17.82 below lsd, May 27, 1940; lowest 43.00 below lsd, Feb. 27, 1947. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	32.85	Apr. 2	33.76	July 2	31.73	Oct. 1	34.19
Feb. 1	32.48	30	32.60	31	33.28	Nov. 2	31.39
28	31.23	May 31	32.88	Aug. 31	32.58	30	33.77

M-6. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 23 S., R. 2 W. Drilled observation and public-supply water-table well in sand and gravel, diameter 18 inches, depth 257 feet. Highest water level 10.10 below lsd, Apr. 2, 1951; lowest 107.0 below lsd, Nov. 30, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	99.5	Apr. 2	10.10	July 2	32.5	Oct. 1	101.0
Feb. 1	36.0	30	34.0	31	103.5	Nov. 2	35.0
28	33.0	May 31	100.5	Aug. 31	34.0	30	107.0

M-6a. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 18.63 below lsd, June 3, 1940; lowest 39.43 below lsd, Dec. 3, 1947. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	34.93	Apr. 2	35.73	July 2	33.50	Oct. 1	36.35
Feb. 1	33.77	30	34.14	31	35.62	Nov. 2	35.21
28	32.74	May 31	35.18	Aug. 31	34.24	30	36.20

M-6b. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 23 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 18.46 below lsd, June 3, 1940; lowest 36.88 below lsd, Oct. 3, 1948. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	34.48	Apr. 2	35.28	July 2	33.10	Oct. 1	35.80
Feb. 1	33.62	30	33.65	31	35.08	Nov. 2	33.82
28	32.43	May 31	34.64	Aug. 31	33.80	30	35.65

M-7. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Drilled public-supply water-table well in sand and gravel, diameter 18 inches, depth 122 feet. Highest water level 11.03 below lsd, June 13, 1939; lowest 49.50 below lsd, May 1, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	48.00	Apr. 2	49.00	July 2	26.00	Oct. 1	28.00
Feb. 1	28.00	May 1	49.50	30	46.00	Nov. 2	27.00
28	48.00	31	47.00	Aug. 31	45.00	30	45.00

M-7a. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 11.20 below lsd, Aug. 21, 1939; lowest 33.69 below lsd, May 1, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	28.89	Apr. 2	33.35	July 2	26.74	Oct. 1	27.38
Feb. 1	27.16	May 1	33.69	30	29.78	Nov. 2	27.30
28	32.12	31	31.40	Aug. 31	29.80	30	29.67

M-7b. City of Wichita. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 11.24 below lsd, Aug. 21, 1939; lowest 31.19 below lsd, May 1, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	27.11	Apr. 2	30.65	July 2	27.04	Oct. 1	27.17
Feb. 1	27.33	May 1	31.19	30	27.65	Nov. 2	27.30
28	29.70	31	29.26	Aug. 31	27.73	30	27.45

M-8. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, T. 24 S., R. 2 W. Drilled observation and public-supply water-table well in sand and gravel, diameter 18 inches, depth 257 feet. Highest water level 15.93 below lsd, May 27, 1940; lowest 115.0 below lsd, Aug. 30, 1950. Records available: 1939-51.

## M-8--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	33.00	Apr. 2	33.00	July 2	110.50	Oct. 1	102.00
Feb. 1	114.00	30	112.00	31	33.00	Nov. 2	110.00
28	32.00	May 31	32.50	Aug. 31	104.00	30	106.00

M-8a. City of Wichita.  $SE\frac{1}{4}NE\frac{1}{4}$  sec. 6, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 51 feet. Highest water level 14.72 below lsd, June 3, 1940; lowest 41.08 below lsd, Sept. 30, 1950. Records available: 1939-51.

Jan. 2	30.57	Apr. 2	30.87	July 2	31.40	Oct. 1	31.95
Feb. 1	31.16	30	31.60	31	31.30	Nov. 2	31.69
28	30.09	May 31	30.85	Aug. 31	31.93	30	32.11

M-8b. City of Wichita.  $SE\frac{1}{4}NE\frac{1}{4}$  sec. 6, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 54 feet. Highest water level 13.30 below lsd, June 3, 1940; lowest 32.01 below lsd, Oct. 3, 1948. Records available: 1939-51.

Jan. 2	29.16	Apr. 2	29.54	July 2	29.80	Oct. 1	30.54
Feb. 1	29.74	30	30.13	31	29.80	Nov. 2	30.33
28	28.63	May 31	29.43	Aug. 31	30.42	30	30.70

M-9. City of Wichita.  $NW\frac{1}{4}NW\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 248 feet. Highest water level 10.82 below lsd, May 27, 1940; lowest 76.00 below lsd, Sept. 30, 1949. Records available: 1939-51.

Jan. 2	29.00	Apr. 2	30.00	July 2	30.50	Oct. 1	70.00
Feb. 1	30.00	30	30.50	30	73.00	Nov. 2	31.00
28	73.00	May 31	72.00	Aug. 31	32.00	30	31.50

M-9a. City of Wichita.  $NW\frac{1}{4}NW\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 51 feet. Highest water level 10.40 below lsd, May 27, 1940; lowest 30.19 below lsd, Jan. 5, 1949. Records available: 1939-51.

Jan. 2	27.58	Apr. 2	26.78	July 2	28.62	Oct. 1	29.89
Feb. 1	27.28	30	28.22	30	29.65	Nov. 2	28.84
28	28.98	May 31	29.22	Aug. 31	29.10	30	28.78

M-9b. City of Wichita.  $NW\frac{1}{4}NW\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 51 feet. Highest water level 9.12 below lsd, May 27, 1940; lowest 29.84 below lsd, Jan. 5, 1949. Records available: 1939-51.

Jan. 3	26.45	Apr. 2	26.44	July 2	27.45	Oct. 1	28.22
Feb. 1	26.06	30	27.04	30	28.99	Nov. 2	27.72
28	27.50	May 31	27.57	Aug. 31	27.82	30	27.55

M-10. City of Wichita.  $NE\frac{1}{4}NW\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 259 feet. Highest water level 12.05 below lsd, May 27, 1940; lowest 88.0 below lsd, Nov. 30, 1949. Records available: 1939-51.

Jan. 2	32.00	Apr. 3	68.00	July 2	32.00	Oct. 1	82.00
Feb. 1	31.00	30	32.00	30	85.00	Nov. 2	32.00
28	32.00	May 31	85.50	Aug. 31	82.00	30	84.00

M-10a. City of Wichita.  $NE\frac{1}{4}NW\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 51 feet. Highest water level 11.24 below lsd, May 27, 1940; lowest 35.91 below lsd, Dec. 3, 1947. Records available: 1939-51.

Jan. 2	28.99	Apr. 2	33.66	July 2	31.10	Oct. 1	35.20
Feb. 1	29.01	30	30.33	30	33.60	Nov. 2	31.16
28	29.74	May 31	34.24	Aug. 31	34.87	30	34.03

M-10b. City of Wichita.  $NE\frac{1}{4}NW\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 51 feet. Highest water level 10.44 below lsd, May 27, 1940; lowest 31.78 below lsd, Oct. 1, 1951. Records available: 1939-51.

Jan. 2	28.01	Apr. 2	30.35	July 2	29.83	Oct. 1	31.78
Feb. 1	27.87	30	29.23	30	30.64	Nov. 2	29.88
28	28.68	May 31	30.74	Aug. 31	30.80	30	30.70

M-11. City of Wichita.  $SW\frac{1}{4}NW\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 227 feet. Highest water level 7.11 below lsd, May 27, 1940; lowest 65.79 below lsd, Aug. 3, 1945. Records available: 1939-51.

Jan. 2	55.24	Apr. 2	34.74	July 2	56.08	Oct. 1	54.64
Feb. 1	55.51	30	56.33	30	25.42	Nov. 2	58.50
28	57.80	May 31	26.12	Aug. 31	54.80	30	56.15

M-11a. City of Wichita. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 6.38 below lsd, May 27, 1940; lowest 27.32 below lsd, Nov. 2, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	25.79	Apr. 2	23.53	July 2	26.86	Oct. 1	26.21
Feb. 1	25.36	30	26.49	30	25.90	Nov. 2	27.32
28	26.90	May 31	24.58	Aug. 31	27.08	30	26.81

M-11b. City of Wichita. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 7.67 below lsd, May 27, 1940; lowest 27.45 below lsd, Sept. 2, 1949. Records available: 1939-51.

Jan. 2	25.80	Apr. 2	24.83	July 2	26.91	Oct. 1	26.47
Feb. 1	25.44	30	26.49	30	26.07	Nov. 2	27.27
28	26.90	May 31	25.84	Aug. 31	27.18	30	26.87

M-12. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 236 feet. Highest water level 11.41 below lsd, Aug. 21, 1939; lowest 82.50 below lsd, Nov. 2, 1951. Records available: 1939-51.

Jan. 2	78.00	Apr. 2	78.00	July 2	80.00	Oct. 1	79.00
Feb. 1	81.00	30	80.00	30	81.00	Nov. 2	82.50
28	32.00	May 31	79.00	Aug. 31	80.00	30	80.00

M-12a. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{2}$  inches, depth 69 feet. Highest water level 10.73 below lsd, May 27, 1940; lowest 36.97 below lsd, Aug. 31, 1951. Records available: 1939-51.

Jan. 2	33.99	Apr. 2	32.36	July 2	35.81	Oct. 1	36.43
Feb. 1	34.94	30	35.89	30	30.36	Nov. 2	36.50
28	30.68	May 31	36.76	Aug. 31	36.97	30	35.75

M-12b. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 69 feet. Highest water level 11.70 below lsd, Aug. 21, 1939 and Nov. 27, 1940; lowest 37.67 below lsd, Aug. 31, 1951. Records available: 1939-51.

Jan. 2	34.71	Apr. 2	33.08	July 2	37.50	Oct. 1	37.00
Feb. 1	35.44	30	36.56	30	31.50	Nov. 2	37.18
28	32.08	May 31	37.45	Aug. 31	37.67	30	36.38

M-13. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 17, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 245 feet, cased to 188 feet. Highest water level 8.27 below lsd, Aug. 21, 1939; lowest 65.06 below lsd, May 31, 1951. Records available: 1939-51.

Jan. 2	26.29	Apr. 4	26.39	July 2	26.76	Oct. 1	26.72
Feb. 1	25.65	30	28.20	30	64.24	Nov. 2	27.42
28	64.02	May 31	65.06	Aug. 31	28.83	30	62.08

M-13a. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 17, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 7.89 below lsd, May 27, 1940; lowest 27.57 below lsd, Jan. 5, 1949. Records available: 1939-51.

Jan. 2	24.83	Apr. 2	25.51	July 2	26.02	Oct. 1	25.70
Feb. 1	24.70	30	26.12	30	26.97	Nov. 2	25.48
28	26.86	May 31	27.54	Aug. 31	26.45	30	26.25

M-13b. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 17, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 7.63 below lsd, May 27, 1940; lowest 27.72 below lsd, May 31, 1951. Records available: 1939-51.

Jan. 2	25.46	Apr. 2	26.31	July 2	26.91	Oct. 1	26.86
Feb. 1	25.28	30	26.75	30	27.30	Nov. 2	26.30
28	26.74	May 31	27.72	Aug. 31	27.50	30	26.55

M-14. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 102 feet. Highest water level 9.07 below lsd, May 27, 1940; lowest 59.08 below lsd, Jan. 5, 1949. Records available: 1939-51.

Jan. 2	52.50	Apr. 2	30.50	July 2	53.50	Oct. 1	34.00
Feb. 1	28.00	30	33.00	30	50.50	Nov. 2	50.00
28	54.50	May 31	52.00	Aug. 31	54.00	30	30.00

M-14a. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 50 feet, cased to 47 feet. Highest water level 8.31 below lsd, Apr. 4, 1939; lowest 38.0 below lsd, Aug. 31, 1951. Records available: 1939-51.

## M-14a--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	35.23	Apr. 2	29.97	July 2	35.22	Oct. 1	33.65
Feb. 1	26.52	30	32.23	30	32.41	Nov. 2	32.13
28	37.09	May 31	35.20	Aug. 31	38.0	30	28.92

M-14b. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 57 feet. Highest water level 8.16 below lsd, May 13, May 27 and June 3, 1940; lowest 33.96 below lsd, Aug. 31, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	31.04	Apr. 2	29.81	July 2	31.28	Oct. 1	33.20
Feb. 1	26.62	30	31.49	30	29.98	Nov. 2	28.72
28	32.76	May 31	31.38	Aug. 31	33.96	30	28.93

M-15. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 193 feet. Highest water level 13.92 below lsd, Apr. 17, 1939; lowest 80.82 below lsd, Jan. 7, 1947. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	27.00	Apr. 2	30.50	July 2	66.00	Oct. 1	69.00
Feb. 1	31.00	30	30.00	30	28.00	Nov. 2	32.00
28	30.00	May 31	30.00	Aug. 31	30.00	30	69.00

M-15a. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 67 feet. Highest water level 12.49 below lsd, May 27, 1940; lowest 35.74 below lsd, Aug. 1, 1950. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	25.41	Apr. 2	28.92	July 2	33.18	Oct. 1	35.08
Feb. 1	28.83	30	29.10	30	27.50	Nov. 2	28.54
28	28.32	May 31	28.62	Aug. 31	28.45	30	33.03

M-15b. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 62 feet. Highest water level 13.45 below lsd, May 27, 1940; lowest 34.89 below lsd, Oct. 1, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	26.22	Apr. 2	29.84	July 2	33.00	Oct. 1	34.89
Feb. 1	29.74	20	29.89	30	28.38	Nov. 2	29.53
28	29.34	May 31	29.43	Aug. 31	29.33	30	32.93

M-16. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 193 feet. Highest water level 10.71 below lsd, Aug. 21, 1939; lowest 71.00 below lsd, Aug. 1, 1950. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	30.00	Apr. 2	67.00	July 2	27.50	Oct. 1	68.00
Feb. 1	69.00	30	66.00	30	66.00	Nov. 2	67.00
28	68.00	May 31	68.00	Aug. 31	68.00	30	26.50

M-16a. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 57 feet. Highest water level 10.93 below lsd, Aug. 21, 1939; lowest 33.38 below lsd, Aug. 1, 1950. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	24.33	Apr. 2	32.04	July 2	26.98	Oct. 1	32.42
Feb. 1	31.79	30	32.29	30	30.06	Nov. 2	30.73
28	31.95	May 31	31.64	Aug. 31	31.15	30	26.08

M-16b. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 56 feet. Highest water level 11.02 below lsd, May 27, 1940; lowest 25.96 below lsd, Apr. 2, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	23.98	Apr. 2	25.96	July 2	25.20	Oct. 1	25.30
Feb. 1	25.43	30	26.08	30	24.76	Nov. 2	25.10
28	25.53	May 31	25.76	Aug. 31	25.05	30	24.56

M-17. City of Wichita. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 185 feet. Highest water level 6.58 below lsd, Aug. 21, 1939; lowest 62.50 below lsd, Aug. 31, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	19.50	Apr. 3	61.50	July 2	61.00	Oct. 1	54.00
Feb. 1	21.00	30	21.50	30	61.00	Nov. 2	19.00
28	60.50	May 31	20.00	Aug. 31	62.50	30	18.50

M-17a. City of Wichita. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 5.66 below lsd, Aug. 21, 1939; lowest 27.28 below lsd, Mar. 31, 1950. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	17.97	Apr. 3	19.90	July 2	17.42	Oct. 1	17.08
Feb. 1	18.60	30	19.48	30	16.17	Nov. 2	16.58
28	19.52	May 31	16.80	Aug. 31	17.30	30	16.50

M-17b. City of Wichita. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{2}$  inches, depth 51 feet. Highest water level 4.01 below lsd, Aug. 21, 1939; lowest 18.27 below lsd, Apr. 2, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	16.47	Apr. 2	18.27	July 2	16.10	Oct. 1	15.72
Feb. 1	17.17	30	18.09	30	15.02	Nov. 2	15.36
28	17.90	May 31	16.70	Aug. 31	15.86	30	15.13

M-18. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 158 feet. Highest water level 10.00 below lsd, Aug. 21, 1939; lowest 59.58 below lsd, Apr. 30, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	22.54	Apr. 2	22.50	July 2	21.24	Oct. 1	54.40
Feb. 1	43.84	30	59.58	30	57.30	Nov. 2	58.00
28	58.94	May 31	58.55	Aug. 31	50.56	30	58.00

M-18a. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{2}$  inches, depth 72 feet. Highest water level 9.62 below lsd, Aug. 21, 1939; lowest 37.12 below lsd, Apr. 30, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	21.22	Apr. 2	21.21	July 2	20.04	Oct. 1	34.64
Feb. 1	36.15	30	37.12	30	34.62	Nov. 2	34.23
28	36.91	May 31	35.64	Aug. 31	34.98	30	34.80

M-18b. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, T. 24 S., R. 2 W. Drilled observation water-table well in sand, diameter 1 $\frac{1}{2}$  inches, depth 63 feet. Highest water level 9.38 below lsd, Aug. 21, 1939; lowest 29.06 below lsd, Apr. 30, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	20.77	Apr. 3	20.85	July 2	19.39	Oct. 1	26.69
Feb. 1	28.25	30	29.06	30	26.61	Nov. 2	25.98
28	28.91	May 31	27.41	Aug. 31	26.63	30	26.54

M-19. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 145 feet. Highest water level 10.82 below lsd, Aug. 21, 1939; lowest 47.00 below lsd, Aug. 1, 1950. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	22.26	Apr. 3	23.04	July 2	45.78	Oct. 1	43.60
Feb. 1	22.51	30	23.67	30	21.11	Nov. 2	20.26
28	22.86	May 31	22.20	Aug. 31	19.86	30	20.40

M-19a. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 60 feet. Highest water level 13.11 below lsd, Aug. 21, 1939; lowest 27.08 below lsd, Sept. 29, 1950. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	23.65	Apr. 3	24.61	July 2	25.87	Oct. 1	24.36
Feb. 1	23.73	30	25.10	30	22.48	Nov. 2	21.56
28	24.12	May 31	23.59	Aug. 31	22.14	30	21.60

M-19b. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 11.47 below lsd, Aug. 21, 1939; lowest 23.89 below lsd, Apr. 30, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	22.73	Apr. 3	23.39	July 2	22.25	Oct. 1	21.10
Feb. 1	23.80	30	23.89	30	21.53	Nov. 2	20.71
28	23.21	May 31	22.68	Aug. 31	21.26	30	20.85

M-20. City of Wichita. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 248 feet. Highest water level 9.74 below lsd, May 27, 1940; lowest 86.00 below lsd, Sept. 30, 1950. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	28.50	Apr. 3	30.00	July 2	31.00	Oct. 1	74.00
Feb. 1	30.00	30	31.00	30	76.00	Nov. 2	78.00
28	77.00	May 31	32.00	Aug. 31	75.00	30	32.50

M-20a. City of Wichita. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 9.28 below lsd, May 27, 1940; lowest 30.52 below lsd, Aug. 31, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	27.60	Apr. 2	28.31	July 2	29.70	Oct. 1	29.89
Feb. 1	27.66	30	29.24	30	20.43	Nov. 2	30.44
28	29.39	May 31	29.73	Aug. 31	30.52	30	29.20

M-20b. City of Wichita. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 8.49 below lsd, May 27, 1940; lowest 31.00 below lsd, Aug. 31, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	28.26	Apr. 2	28.98	July 2	30.33	Oct. 1	30.11
Feb. 1	28.34	30	29.88	30	30.75	Nov. 2	30.72
28	29.75	May 31	30.35	Aug. 31	31.00	30	29.77

M-21. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 80 feet. Highest water level 8.32 below lsd, Aug. 21, 1939; lowest 44.00 below lsd, Sept. 2, 1949. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	42.00	Apr. 3	42.00	July 2	39.00	Oct. 1	17.00
Feb. 1	43.00		30	30	42.00	Nov. 2	17.00
28	20.00	May 31	18.50	Aug. 31	43.00	30	17.00

M-21a. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 8.50 below lsd, Aug. 21, 1939; lowest 31.89 below lsd, Dec. 4, 1946. Records available: 1939-51.

Jan. 2	27.37	Apr. 3	27.27	July 2	24.03	Oct. 1	19.70	
Feb. 1	28.18		30	26.20	30	26.08	Nov. 2	18.84
28	22.23	May 31	20.63	Aug. 31	26.64	30	19.18	

M-21b. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 8.08 below lsd, Aug. 21, 1939; lowest 26.61 below lsd, Aug. 31, 1951. Records available: 1939-51.

Jan. 2	24.42	Apr. 3	24.42	July 2	21.49	Oct. 1	11.34	
Feb. 1	25.10		30	23.46	30	23.16	Nov. 2	18.50
28	21.88	May 31	20.34	Aug. 31	26.61	30	18.85	

M-22. City of Wichita. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 62 feet. Highest water level 9.20 below lsd, Aug. 21, 1939; lowest 54.30 below lsd, Aug. 1, 1950. Records available: 1939-51.

Jan. 3	23.18	Apr. 2	23.70	July 2	21.75	Oct. 1	20.82	
Feb. 1	53.45		30	23.58	30	21.42	Nov. 2	49.24
28	23.08	May 31	21.59	Aug. 31	22.34	30	20.53	

M-22a. City of Wichita. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 8.49 below lsd, Aug. 21, 1939; lowest 30.65 below lsd, Feb. 1, 1951. Records available: 1939-51.

Jan. 3	21.83	Apr. 2	22.33	July 2	20.45	Oct. 1	19.49	
Feb. 1	30.65		30	22.18	30	20.09	Nov. 2	26.00
28	21.71	May 31	19.23	Aug. 31	21.03	30	19.14	

M-22b. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 50 feet. Highest water level 9.28 below lsd, Aug. 21, 1939; lowest 25.34 below lsd, Feb. 1, 1951. Records available: 1939-51.

Jan. 3	22.88	Apr. 2	23.43	July 2	21.63	Oct. 1	20.52	
Feb. 1	25.34		30	23.19	30	21.26	Nov. 2	21.57
28	22.73	May 31	21.27	Aug. 31	22.23	30	20.13	

M-23. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 204 feet. Highest water level 7.85 below lsd, Aug. 21, 1939; lowest 75.00 below lsd, Nov. 30, 1951. Records available: 1939-51.

Jan. 3	65.00	Apr. 2	66.00	July 2	18.00	Oct. 1	18.00	
Feb. 1	20.00		30	62.50	30	71.00	Nov. 2	74.00
28	67.00	May 31	74.00	Aug. 31	72.50	30	75.00	

M-23a. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 8.27 below lsd, Aug. 21, 1939; lowest 20.77 below lsd, Jan. 5, 1949. Records available: 1939-51.

Jan. 2	20.33	Apr. 2	20.40	July 2	16.46	Oct. 1	15.61	
Feb. 2	19.11		30	21.08	30	18.30	Nov. 2	17.45
28	20.58	May 31	19.29	Aug. 31	19.06	30	18.09	

M-23b. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 7.50 below lsd, Aug. 21, 1939; lowest 20.33 below lsd, Jan. 5, 1949. Records available: 1939-51.

Jan. 3	18.94	Apr. 2	19.02	July 2	15.60	Oct. 1	15.70	
Feb. 2	18.31		30	19.69	30	16.81	Nov. 2	15.96
28	19.12	May 31	17.72	Aug. 31	17.60	30	16.62	

M-24. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 97 feet. Highest water level 8.71 below lsd, Aug. 21, 1939; lowest 48.96 below lsd, Dec. 3, 1947. Records available: 1939-51.

Jan. 3	21.00	Apr. 2	21.00	July 2	18.50	Oct. 1	18.00	
Feb. 2	21.00		30	20.33	30	18.00	Nov. 2	18.50
28	21.00	May 31	59.00	Aug. 31	20.00	30	19.00	

M-24a. City of Wichita.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 54 feet. Highest water level 8.88 below lsd, Aug. 21, 1939; lowest 22.77 below lsd, May 31, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	19.82	Apr. 2	21.03	July 2	18.30	Oct. 1	17.67
Feb. 2	19.82	30	20.19	30	17.89	Nov. 2	17.70
28	20.03	May 31	22.77	Aug. 31	18.63	30	18.35

M-24b. City of Wichita.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 51 feet. Highest water level 11.17 below lsd, Aug. 28, 1939; lowest 22.40 below lsd, Feb. 28, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	22.06	Apr. 2	22.33	July 2	20.87	Oct. 1	20.11
Feb. 2	22.17	30	22.38	30	20.11	Nov. 2	19.96
28	22.40	May 31	21.81	Aug. 31	20.82	30	20.60

M-25. City of Wichita.  $SW\frac{1}{4}SE\frac{1}{4}$  sec. 36, T. 24 S., R. 2 W. Drilled public supply water-table well in sand and gravel, diameter 18 inches, depth 189 feet. Highest water level 5.54 below lsd, Aug. 21, 1939; lowest 58.62 below lsd, Oct. 31, 1949. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	52.27	Apr. 2	17.72	July 2	46.56	Oct. 1	13.05
Feb. 2	50.12	30	18.58	30	49.51	Nov. 2	47.24
28	17.35	May 31	14.70	Aug. 31	49.72	30	14.45

M-25a. City of Wichita.  $SW\frac{1}{4}SE\frac{1}{4}$  sec. 36, T. 24 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 50 feet, cased to 47 feet. Highest water level 5.31 below lsd, Aug. 21, 1939; lowest 16.78 below lsd, Feb. 2, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	16.75	Apr. 2	16.33	July 2	12.86	Oct. 1	12.24
Feb. 2	16.78	30	16.65	30	13.10	Nov. 2	13.82
28	15.85	May 31	13.59	Aug. 31	15.27	30	13.17

M-26. City of Wichita.  $SW\frac{1}{4}NE\frac{1}{4}$  sec. 22, T. 24 S., R. 2 W. Drilled public supply water-table well in alluvium, diameter 18 inches, depth 195 feet. Highest water level 13.96 below lsd, July 8, 1949; lowest 70.7 below lsd, Aug. 1, 1950. Records available: 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	20.0	Apr. 3	70.5	July 2	68.0	Oct. 1	16.0
Feb. 1	20.0	30	20.0	30	65.5	Nov. 2	16.0
28	69.0	May 31	68.0	Aug. 31	17.0	30	69.5

M-26a. City of Wichita.  $SW\frac{1}{4}NW\frac{1}{4}$  sec. 22, T. 24 S., R. 2 W. Drilled observation water-table well in Meade formation, diameter  $1\frac{1}{4}$  inches, depth 81 feet. Highest water level 15.99 below lsd, Nov. 30, 1949; lowest 21.78 below lsd, Apr. 3, 1951. Records available: 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	19.00	Apr. 3	21.78	July 2	18.48	Oct. 1	16.11
Feb. 1	18.82	30	20.05	30	17.76	Nov. 2	16.10
28	21.30	May 31	18.31	Aug. 31	16.64	30	19.04

M-26b. City of Wichita.  $SW\frac{1}{4}NW\frac{1}{4}$  sec. 22, T. 24 S., R. 2 W. Drilled observation water-table well in Meade formation, diameter  $1\frac{1}{4}$  inches, depth 79 feet. Highest water level 11.62 below lsd, July 7, 1948; lowest 23.10 below lsd, Apr. 30, 1951. Records available: 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	17.74	Apr. 3	19.28	July 2	16.14	Oct. 1	14.86
Feb. 1	17.55	30	23.10	30	15.40	Nov. 2	14.80
28	18.85	May 31	16.16	Aug. 31	15.39	30	16.53

#### Haskell County

6. Copeland State Bank.  $NE\frac{1}{4}NE\frac{1}{4}$  sec. 11, T. 29 S., R. 31 W. Drilled unused water-table well in Ogallala for nation, diameter 5 inches, depth 178 feet. Highest water level 154.73 below lsd, Nov. 20, 1946; lowest 158.66 below lsd, Feb. 6, 1946. Records available: 1941-51. Feb. 21, 156.00; May 9, 155.93. Measurement discontinued.

7. Etta McCoy.  $NW\frac{1}{4}NW\frac{1}{4}$  sec. 2, T. 30 S., R. 32 W. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 196 feet. Highest water level 187.00 below lsd, Aug. 22, 1951; lowest 191.20 below lsd, Feb. 21, 1951. Records available: 1941-51. Feb. 21, 191.20; May 9, 189.15; Aug. 22, 187.00; Nov. 28, 187.73.

10. Eli Stoops.  $SE\frac{1}{4}NW\frac{1}{4}$  sec. 33, T. 30 S., R. 34 W. Drilled unused water-table well in Ogallala formation, diameter 10 inches, depth 61 feet. Highest water level 45.40 below lsd, Oct. 12, 1950; lowest 49.90 below lsd, May 19, 1949. Records available: 1941-51. Jan. 18, 47.00; Feb. 21, 48.42; Mar. 12, 47.47; Nov. 28, 45.69; Dec. 18, 45.85.

11. L. C. Leonard.  $SE\frac{1}{4}SW\frac{1}{4}$  sec. 20, T. 30 S., R. 32 W. Drilled unused well, diameter 6 inches, depth 198 feet. Records available: 1941-49. Measurement discontinued.

12. Sybol Smith.  $SW\frac{1}{4}SW\frac{1}{4}$  sec. 11, T. 30 S., R. 32 W. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 198 feet. Highest water level 179.40 below lsd, Nov. 3, 1941; lowest 187.64 below lsd, Aug. 16, 1949. Records available: 1941-51. May 9, 181.54; Aug. 22, 180.73; Nov. 28, 180.63.

#### Hodgeman County

3. C. A. Bradley. Formerly W. J. Fox.  $SW\frac{1}{4}NW\frac{1}{4}$  sec. 12, T. 21 S., R. 22 W. Dug and drilled irrigation water-table well in alluvium, diameter 60 to 20 inches, depth 76 feet. Highest water level 23.84 below lsd, Oct. 24, 1951; lowest 34.77 below lsd, Sept. 20, 1940. Records available: 1940-51. Jan. 24, 26.62; Apr. 18, 27.00; Oct. 24, 23.84.

4. Bill Macey.  $SW\frac{1}{4}SW\frac{1}{4}$  sec. 13, T. 22 S., R. 22 W. Dug and drilled irrigation water-table well in alluvium, diameter 60 to 20 inches, depth 50 feet. Highest water level 13.81 below lsd, July 16, 1951; lowest 27.52 below lsd, Oct. 2, 1941. Records available: 1940-51. Jan. 24, 21.34; Apr. 18, 21.20; July 16, 13.81.

#### Jackson County

5-15-22db. Fred Bergman Estate. Drilled domestic water-table well in glacial sand and gravel, diameter 12 inches, depth 32 feet, tile casing. Highest water level 12.83 below lsd, Sept. 27, 1951; lowest 21.36 below lsd, Feb. 9, 1949. Records available: 1948-51. Apr. 17, 17.92; Aug. 1, 14.12; Sept. 27, 12.83; Nov. 27, 13.22.

7-15-3ca. Fred Shafer. Drilled unused water table well in alluvium, diameter 6 inches, depth 17 feet. Highest water level 5.85 below lsd, July 3, 1948; lowest 7.22 below lsd, Oct. 14, 1948. Records available: 1948-51. Apr. 17, 6.11; Aug. 1, 6.12; Sept. 27, 6.05; Nov. 27, 6.12.

9-15-23dcb. B. F. Albright. Dug unused water-table well in glacial sand and gravel, diameter 20 inches, depth 16 feet, cribbed with brick. Highest water level 2.84 below lsd, Sept. 27, 1951; lowest 8.31 below lsd, Oct. 14, 1948. Records available: 1948-51. Apr. 17, 4.21; Aug. 1, 4.02; Sept. 27, 2.84; Nov. 27, 2.85.

#### Jefferson County

11-19-27bcc. Buck Creek School. Dug public supply water-table well in terrace deposits, diameter 24 inches, depth 33 feet, cribbed with rock. Highest water level 19.77 below lsd, Aug. 1, 1951; lowest 27.56 below lsd, Jan. 17, 1950. Records available: 1948-51. Apr. 17, 27.48; Aug. 1, 19.77; Sept. 27, 21.28; Nov. 27, 22.88.

11-19-29bc. Bill Green. Dug unused water-table well in alluvium, diameter 36 inches, depth 30 feet, cribbed with rock. Highest water level 6.72 below lsd, Aug. 1, 1951; lowest 24.87 below lsd, Nov. 27, 1948. Records available: 1948-51. Apr. 17, 21.92; Aug. 1, 6.72; Sept. 27, 9.45; Nov. 27, 13.97.

#### Jewell County

6. H. C. Doud.  $SE\frac{1}{4}SW\frac{1}{4}$  sec. 5, T. 3 S., R. 9 W. Drilled unused water-table well in Niobrara formation, diameter 8 inches, depth 51 feet, tile casing. Highest water level 32.09 below lsd, July 24, 1951; lowest 46.76 below lsd, Oct. 13, 1937. Records available: 1934-44, 1946-51. Jan. 20, 39.15; May 12, 35.89; July 24, 32.09; Aug. 28, 33.94; Oct. 24, 35.94; Dec. 13, 35.22.

8. Will Zadina.  $NW\frac{1}{4}SW\frac{1}{4}$  sec. 17, T. 3 S., R. 9 W. Records available: 1935-44, 1946-49. Measurement discontinued.

12. M. W. Howe. Lot 4, sec. 30, T. 3 S., R. 9 W. Dug unused water-table well in Niobrara formation, diameter 36 inches, depth 88 feet, cribbed with brick. Highest water level 39.14 below lsd, July 24, 1951; lowest 77.79 below lsd, June 8, 1938. Records available: 1934-51. Jan. 20, 63.63; May 12, 53.85; July 24, 39.14; Aug. 28, 39.86; Oct. 24, 51.72; Dec. 13, 52.61.

14. C. Walker.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 24, T. 3 S., R. 9 W. Dug unused water-table well in Niobrara formation, diameter 42 inches, depth 54 feet, cribbed with rock. Highest water level 12.54 below lsd, July 24, 1951; lowest 46.69 below lsd, Mar. 20, 1934. Records available: 1934-44, 1946-51. Jan. 20, 21.55; May 12, 22.10; July 24, 12.54; Aug. 28, 13.61; Oct. 24, 13.93; Dec. 13, 17.21.

22. Meyer Miles.  $NW\frac{1}{4}NE\frac{1}{4}$  sec. 10, T. 5 S., R. 9 W. Drilled unused water-table well in alluvium, diameter 20 inches, depth 48 feet, tile casing. Highest water level 7.79 below lsd, July 24, 1951; lowest 25.68 below lsd, Aug. 10, 1934. Records available: 1934-51. Jan. 20, 10.46; May 12, 9.39; July 24, 7.79; Aug. 28, 9.72; Oct. 24, 9.75; Dec. 13, 10.31.

34. Glen Kindler.  $SE_{\frac{1}{4}}SE_{\frac{1}{4}}$  sec. 18, T. 3 S., R. 10 W. Dug unused water-table well in alluvium and colluvium, diameter 4 feet, depth 36 feet, cribbed with rock. Highest water level 5.14 below lsd, July 24, 1951; lowest 33.92 below lsd, Aug. 19, 1940. Records available: 1939-44, 1946-51. Jan. 20, 9.34; July 24, 5.14; Aug. 28, 5.86; Oct. 24, 6.24; Dec. 13, 6.49.

41. Walter Dietz. Lot 16, sec. 6, T. 5 S., R. 9 W. Drilled water-table well in alluvium and colluvium, diameter 8 inches, depth 31 feet, tile casing. Highest water level 8.40 below lsd, July 23, 1951; lowest 27.38 below lsd, May 23, 1941. Records available: 1934-44, 1946-51. Jan. 20, 10.69; May 12, 13.10; July 23, 8.40; Aug. 28, 9.22; Oct. 24, 10.35; Dec. 13, 10.55.

44. Cleo Gimple.  $SE_{\frac{1}{4}}SW_{\frac{1}{4}}$  sec. 13, T. 4 S., R. 9 W. Drilled stock water-table well in alluvium, diameter 6 inches, depth 37 feet, tile casing. Highest water level 5.00 below lsd, Aug. 2, 1944; lowest 24.03 below lsd, May 9, 1935. Records available: 1934-44, 1946-51. Jan. 20, 9.78; July 24, 9.04.

45. Victor Yapp.  $NE_{\frac{1}{4}}SW_{\frac{1}{4}}$  sec. 24, T. 4 S., R. 10 W. Drilled unused water-table well in alluvium and colluvium, diameter 12 inches, depth 38 feet. Highest water level 14.31 below lsd, July 23, 1951; lowest 34.39 below lsd, Dec. 21, 1940. Records available: 1934-51. Jan. 20, 18.39; May 12, 21.58; July 23, 14.31; Aug. 28, 15.72; Oct. 24, 16.14; Dec. 13, 16.45.

46. Ralph Wierenga. Lot 3, sec. 19, T. 5 S., R. 9 W. Drilled unused water-table well in Carlile shale, diameter 7 inches, depth 29 feet. Highest water level 0.36 below lsd, June 24, 1947; lowest 17.54 below lsd, Aug. 30, 1934. Records available: 1934-44, 1946-51. Jan. 20, 4.48; May 12, 1.40; July 23, 0.86; Aug. 28, 2.30; Oct. 24, 1.92; Dec. 13, 1.92.

47. Meyer Miles.  $SE_{\frac{1}{4}}SW_{\frac{1}{4}}$  sec. 3, T. 5 S., R. 9 W. Drilled unused water-table well in deposits of Pleistocene age, diameter 7 inches, depth 17 feet. Highest water level 0.67 below lsd, July 24, 1951; lowest 13.84 below lsd, May 9, 1935. Records available: 1934-44, 1946-51. Jan. 20, 3.78; May 12, 4.15; July 24, 0.67; Aug. 28, 1.34; Oct. 24, 2.76; Dec. 13, 2.80.

49. E. Underwood.  $SW_{\frac{1}{4}}NE_{\frac{1}{4}}$  sec. 5, T. 3 S., R. 9 W. Drilled unused water-table well in Niobrara formation, diameter 12 inches, depth 58 feet. Highest water level 13.15 below lsd, June 24, 1947 and May 12, 1951; lowest 46.83 below lsd, Nov. 24, 1934. Records available: 1934-44, 1946-51. Jan. 20, 15.59; May 12, 13.15.

64. Warren Morgan Co. Formerly Chris Vandeventer.  $SE_{\frac{1}{4}}SW_{\frac{1}{4}}$  sec. 6, T. 3 S., R. 8 W. Drilled domestic water-table well in Niobrara formation, diameter 6 inches, depth 84 feet. Highest water level 51.37 below lsd, Aug. 28, 1951; lowest 65.90 below lsd, Jan. 19, 1938. Aug. 28, 51.37; Oct. 24, 52.17; Dec. 13, 52.51. Records available: 1935-44, 1946-51.

65. Mrs. B. M. Parkhurst.  $SE_{\frac{1}{4}}SE_{\frac{1}{4}}$  sec. 23, T. 3 S., R. 9 W. Dug domestic and stock water-table well in colluvium, diameter 5 feet, depth 42 feet, cribbed with stone. Highest water level 8.42 below lsd, July 24, 1951; lowest 38.10 below lsd, Aug. 20, 1940. Records available: 1939-51. Jan. 20, 10.28; May 12, 10.07; July 24, 8.42; Aug. 28, 9.90; Oct. 24, 10.04; Dec. 13, 10.32.

66. A. E. Cook Estate.  $SE_{\frac{1}{4}}NE_{\frac{1}{4}}$  sec. 1, T. 5 S., R. 10 W. Drilled public supply water-table well in shale, diameter 20 inches, depth 51 feet. Highest water level 8.27 below lsd, Feb. 5, 1950; lowest 27.55 below lsd, Oct. 23, 1940. Records available: 1937-44, 1946-51. May 12, 12.27.

69. Walter Dietz.  $NW_{\frac{1}{4}}$  Lot 2, sec. 7, T. 5 S., R. 9 W. Drilled unused water-table well in gravel, diameter 12 inches, depth 37 feet. Highest water level 5.85 below lsd, July 23, 1951; lowest 24.50 below lsd, Aug. 19, 1940. Records available: 1939-44, 1946-51. Jan. 20, 9.89; May 12, 13.0; July 23, 5.85; Aug. 28, 7.18; Oct. 24, 7.43; Dec. 13, 7.56.

1-6-5da. U. S. Geol. Survey. Drilled observation well, diameter  $1\frac{1}{4}$  inches, depth 13 feet. Records available: 1947-49. No measurement made in 1951.

1-6-5dd. U. S. Geol. Survey. Drilled observation well, diameter  $1\frac{1}{4}$  inches. Records available: 1947-50. No measurement made in 1951.

1-7-1bb. U. S. Geol. Survey. Driven observation well, diameter  $1\frac{1}{4}$  inches, depth 16 feet. Records available: 1947-50. No measurement made in 1951.

1-7-2da. U. S. Geol. Survey. Driven observation well, diameter  $1\frac{1}{4}$  inches, depth 13 feet. Records available: 1947-50. No measurement made in 1951.

#### Johnson County

12-23-29bcc. Wm. Johnson. Dug unused water-table well in Stanton limestone, diameter 36 inches, depth 15 feet, cribbed with rock. Highest water level 2.80 below lsd, June 10, 1949; lowest 8.39 below lsd, Oct. 15, 1948. Records available: 1948-51. Apr. 18, 5.62; Aug. 2, 4.32; Sept. 28, 3.08; Nov. 27, 3.18.

12-25-31aaa. C. M. Webb. Dug domestic and stock water-table well in Bonner Springs shale and Wyandotte limestone, diameter 36 inches, depth 12 feet, cribbed with rock. Highest water level 1.86 below lsd, May 4, 1948; lowest 2.59 below lsd, Dec. 29, 1950. Records available: 1948-51. Apr. 18, 2.47; Aug. 2, 2.45; Sept. 28, 2.38. Measurement discontinued.

14-25-8bb. Mrs. Alice Allison. Dug unused water-table well in Lane shale, diameter 36 inches, depth 28 feet, cribbed with rock. Highest water level 2.37 below lsd, Mar. 1, 1949; lowest 10.48 below lsd, Nov. 26, 1948. Records available: 1948-51. Apr. 18, 6.28; Aug. 2, 6.93; Sept. 28, 5.14; Nov. 27, 6.78.

#### Kearny County

13. D. S. Nicholson. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 15, T. 25 S., R. 37 W. Dug irrigation water-table well in alluvium, diameter 30 inches, depth 16 feet, steel casing. Highest water level 1.47 below lsd, May 9, 1942; lowest 8.93 below lsd, Dec. 20, 1939. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	4.83	Apr. 27	4.83	July 27	5.83	Oct. 26	6.46
Feb. 14	5.08	May 31	4.53	Aug. 24	6.13	Nov. 26	5.49
Mar. 23	5.25	June 29	4.77	Sept. 27	6.23	Dec. 21	5.10

16. C. B. Campbell. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 15, T. 23 S., R. 35 W. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 60 feet. Highest water level 23.69 below lsd, May 31, 1951; lowest 47.81 below lsd, July 3, 1941. Records available: 1939-51. Feb. 14, 31.49; May 31, 23.69; Aug. 28, 24.21.

19. E. M. Beymer. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 26 S., R. 38 W. Drilled unused water-table well in Ogallala formation, depth 152 feet. Highest water level 129.31 below lsd, Aug. 28, 1951; lowest 134.67 below lsd, Nov. 15, 1945. Records available: 1939-51. Feb. 14, 130.30; May 31, 129.53; Aug. 28, 129.31; Nov. 25, 129.70.

23. James Coghill. SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 18, T. 26 S., R. 37 W. Drilled unused water-table well in Ogallala formation, diameter 5 inches, depth 205 feet. Highest water level 171.60 below lsd, Feb. 20, 1948; lowest 184.33 below lsd, Feb. 21, 1947. Records available: 1939-44, 1946-51.

Date	Water level						
Feb. 15, 1946	177.60	Feb. 21, 1949	175.73	Feb. 21, 1950	175.24	Feb. 14, 1951	175.34
Feb. 21, 1947	184.33	May 25	175.58	May 23	175.15	May 31	176.24
Nov. 25	172.90	Aug. 24	175.58	Aug. 17	175.19	Aug. 28	174.64
Feb. 20, 1948	171.60	Nov. 25	175.52	Nov. 28	175.13	Nov. 26	174.96
Nov. 11	175.44						

28. Harry Tate. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 26, T. 22 S., R. 37 W. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 133 feet. Highest water level 115.14 below lsd, Aug. 28, 1951; lowest 123.85 below lsd, Feb. 19, Oct. 22, 1940. Records available: 1939-51. Feb. 14, 119.65; May 31, 116.13; Aug. 28, 115.14; Nov. 26, 115.26.

#### Kingman County

1. A. A. Mueller. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 1, T. 30 S., R. 8 W. Drilled unused well, diameter 6 inches, depth 57 feet. Records available: 1945-50. No measurement made in 1951.

2. L. A. Brammer. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 3, T. 30 S., R. 6 W. Dug unused well, diameter 4 feet, depth 18 feet. Records available: 1945-50. No measurement made in 1951.

4. N. Lawson. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 9, T. 27 S., R. 9 W. Drilled observation water-table well in Meade gravel, diameter 2 inches, depth 76 feet. Highest water level 56.72 below lsd, Sept. 19, 1951; lowest 65.13 below lsd, Feb. 6, 1947. Records available: 1945-51. Aug. 6, 58.20; Sept. 19, 56.72; Dec. 20, 56.74.

6. Jane Garrett. NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 3, T. 29 S., R. 6 W. Drilled unused well, diameter 6 inches, depth 64 feet. Records available: 1945-50. No measurement made in 1951.

7. S. Schrag. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 5, T. 27 S., R. 5 W. Drilled unused well, diameter 6 inches, depth 57 feet. Records available: 1945-50. No measurement made in 1951.

8. John McClure. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 10, T. 27 S., R. 7 W. Drilled unused well, diameter 5 inches, depth 13 feet. Records available: 1945-50. No measurement made in 1951.

10. W. H. Stephens. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 11, T. 30 S., R. 5 W. Drilled unused well, diameter 6 inches, depth 32 feet. Records available: 1945-48. Measurement discontinued.

11. S. Bolinger. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 12, T. 28 S., R. 5 W. Drilled unused well, diameter 6 inches, depth 32 feet. Records available: 1945-50. No measurement made in 1951.

## Kiowa County

4. H. E. Davis. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 4, T. 28 S., R. 16 W. Drilled domestic and irrigation water-table well in Meade formation, diameter 6 inches, depth 109 feet. Highest water level 65.33 below lsd, Dec. 20, 1951; lowest 76.07 below lsd, Aug. 20, 1943. Records available: 1940-51. Mar. 20, 67.00; June 20, 66.76; Sept. 20, 66.15; Dec. 20, 65.33.

7. A. C. Weaver. SW<sup>1</sup> NW<sup>1</sup> sec. 23, T. 27 S., R. 18 W. Drilled irrigation water-table well in Meade formation, diameter 48 to 19 inches, depth 80 feet. Highest water level 20.45 below lsd, Sept. 27, 1950; lowest 32.51 below lsd, Mar. 22, 1941. Records available: 1940-51. Mar. 20, 23, 56; June 20, 20, 89. Measurement discontinued.

8. E. E. Miller. SW<sub>1</sub>SE<sub>4</sub> sec. 18, T. 27 S., R. 18 W. Dug and drilled unused water-table well in Meade formation, diameter 16 inches, depth 75 feet. Highest water level 12.39 below lsd, Sept. 20, 1951; lowest 26.62 below lsd, Apr. 28, 1941. Records available: 1940-51. Mar. 20, 16.89; June 20, 14.83; Sept. 20, 12.39; Dec. 20, 13.22.

10. J. E. Ely. SW<sub>1/4</sub>NW<sub>1/4</sub> sec. 23, T. 30 S., R. 18 W. Drilled unused water-table well in Kiowa shale, diameter 6 inches, depth 154 feet. Highest water level 104.67 below lsd, Sept. 18, 1945; lowest 120.18 below lsd, June 23, 1948. Records available: 1940-51. Mar. 20, 110.31; June 20, 110.13; Sept. 19, 109.54; Dec. 19, 109.83.

19. C. Williamson. SE<sub>4</sub>NE<sub>1/4</sub> sec. 21, T. 27 S., R. 17 W. Drilled irrigation water-table well in Meade formation, diameter 18 inches, depth 90 feet. Highest water level 25.00 below lsd, Dec. 20, 1951; lowest 37.30 below lsd, June 19, 1944. Records available: 1941, 1944-51. Mar. 20, 29.07; June 20, 28.66; Dec. 20, 25.00.

## Labette County

1. J. Ballah, NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 33, T. 31 S., R. 21 E. Driven stock water-table well in alluvium, diameter  $1\frac{1}{4}$  inches, depth 20 feet. Highest water level 1.20 below lsd, Oct. 1, 1945; lowest 15.49 below lsd, Oct. 16, 1946. Records available: 1942-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	13.14	Mar. 17	12.98	June 1	7.10	Oct. 16	5.50
16	13.11	Apr. 1	10.46	16	6.92	Nov. 1	5.09
Feb. 2	13.29	16	9.27	Aug. 16	5.39	Dec. 1	4.73
16	13.79	May 1	9.16	Sept. 2	7.21	17	4.83
Mar. 1	12.47	16	7.24	Oct. 1	3.51	16	4.69

2. C. Givens. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 27, T. 31 S., R. 21 E. Driven unused water-table well in valley alluvium; diameter 1 $\frac{1}{2}$  inches, depth 18 feet. Highest water level 0.28 above lsd, Aug. 1, 1948; lowest 13.62 below lsd. Oct. 17, 1943. Records available: 1942-51.

Jan.	1	6.72	Mar.	17	2.24	June	1	2.63	Nov.	1	1.49
	16	6.68	Apr.	1	.90		16	1.67		17	.49
Feb.	2	6.78		16	.78	Aug.	16	3.97	Dec.	1	.69
	16	7.34	May	1	.72	Sept.	2	6.91		16	.64
Mar.	1	1.61		16	1.62	Oct.	1	1.72			

3. B. H. Foster. SE<sup>1/4</sup>SE<sup>1/4</sup> sec. 34, T. 31 S., R. 21 E. Driven unused water-table well in valley alluvium, diameter 1 1/4 inches, depth 23 feet. Highest water level 0.18 below lsd, Dec. 16, 1951; lowest 11.52 below lsd, Sept. 16, 1946. Records available: 1942-51.

Jan.	1	7.44	Mar.	17	3.77	June	1	3.72	Oct.	16	1.73	
	16	7.52		Apr.	1	3.32		16	3.16	Nov.	1	1.36
Feb.	2	7.73		16	2.15		Aug.	16	2.54		17	.20
	16	7.86	May	1	2.08		Sept.	2	3.39	Dec.	1	.22
Mar.	1	2.84		16	3.38		Oct.	1	1.34		16	.18

4. Roy Schierenberg, SE<sup>1/4</sup>SW<sup>1/4</sup> sec. 3, T. 32 S., R. 21 E. Driven unused water-table well in valley alluvium, diameter 1 $\frac{1}{4}$  inches, depth 17 feet. Highest water level 4.19 below lsd, Nov. 1 and Dec. 16, 1951; lowest 14.77 below lsd, Oct. 16, 1946. Records available: 1942-51.

Jan.	1	10.42	Mar.	17	9.97	June	1	7.91	Oct.	16	4.92		
	16	10.58		Apr.	1	9.64		16	6.96	Nov.	1	4.19	
Feb.	2	10.79			16	8.16	Aug.	16	4.70		17	4.66	
	16	10.92		May	1	8.11		Sept.	2	5.41	Dec.	1	4.32
Mar.	1	9.99			16	7.72	Oct.	1	4.30		16	4.19	

Lane County

17-30-13ccb. Formerly 17-30-13. F. L. Burmeister. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 94 feet. Highest water level 83.83 below lsd, Feb. 1, 1950; lowest 86.36 below lsd, Feb. 23, 1950. Records available: 1950-51. Feb. 8, 85.02; Mar. 23, 85.65; June 18, 85.60; Oct. 17, 85.07; Dec. 10, 84.94.

18 27-13ccc. C. H. Merriweather. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 95 feet. Highest water level 87.52 below lsd, Dec. 10, 1951; lowest 88.50 below lsd, June 18, 1951. Records available: 1950-51. Feb. 8, 87.85; Apr. 23, 88.20; June 18, 88.50; Aug. 14, 87.65; Oct. 17, 88.27; Dec. 10, 87.52.

18-28-15ccc. C. S. and F. E. Boone. Drilled observation water-table well in Ogallala formation, diameter 6 inches, depth 61 feet. Highest water level 54.50 below lsd, Dec. 10, 1951; lowest 56.28 below lsd, June 26, 1950. Records available: 1950-51. Feb. 8, 55.60; Apr. 23, 55.62; June 18, 55.47; Aug. 14, 54.96; Oct. 17, 54.66; Dec. 10, 54.50.

18-29-13bcb. Lane County Airport Association. Drilled observation water-table well in Ogallala formation, diameter 6 inches, depth 65 feet. Highest water level 55.22 below lsd, Oct. 17, 1951; lowest 57.19 below lsd, Apr. 23, 1951. Records available: 1950-51. Feb. 8, 56.28; Apr. 23, 57.19; June 18, 55.23; Aug. 14, 55.58; Oct. 17, 55.22; Dec. 10, 56.01.

19-30-3daa. John Kees. Dug unused water-table well in Ogallala formation, diameter 4 feet, depth 73 feet. Highest water level 66.76 below lsd, Dec. 10, 1951; lowest 69.52 below lsd, June 26, 1950. Records available: 1950-51. Feb. 8, 68.44; Apr. 23, 68.69; June 18, 68.64; Aug. 14, 67.92; Oct. 17, 67.80; Dec. 10, 66.76.

Leavenworth County

8-22-7c. Mrs. Joe Kennedy. Dug unused water-table well in glacial deposits, diameter 5 feet, depth 15 feet, cribbed with rock. Highest water level 1.40 below lsd, Aug. 1, 1951; lowest 9.53 below lsd, Nov. 27, 1948. Records available: 1948-51. Apr. 17, 1.51; Sept. 27, 1.54; Aug. 1, 1.40; Nov. 27, 2.07.

10-22-34ad. A. K. Mussett. Dug unused water-table well in glacial deposits, diameter 6 feet, depth 35 feet, cribbed with brick. Highest water level 0.45 below lsd, Nov. 27, 1951; lowest 4.01 below lsd, Oct. 27, 1950. Records available: 1948-51. Apr. 17, 0.93; Aug. 1, 2.12; Sept. 27, 0.75; Nov. 27, 0.45.

Lincoln County

11-7-32dc. Lincoln Golf Club. Drilled unused water-table well in Dakota formation, diameter 6 inches, depth 97 feet. Highest water level 57.96 below lsd, July 25, 1951; lowest 74.67 below lsd, Sept. 8, 1947. Records available: 1947-51. Jan. 23, 73.79; Mar. 17, 73.43; May 11, 73.47; July 25, 57.96; Aug. 21, 69.59; Oct. 22, 65.12; Dec. 27, 69.57.

12 6-12cd. Harry W. Woody. Dug unused water-table well in alluvium, diameter 4 feet, depth 27 feet, cribbed with rock. Highest water level 11.64 below lsd, Aug. 9, 1948; lowest 15.52 below lsd, Jan. 12, 1948. Records available: 1947-51. Mar. 17, 15.17; May 11, 14.71.

12-6-16cc. O. Anderson. Dug observation water-table well in alluvium, diameter 4 feet, depth 25 feet, cribbed with rock. Highest water level 6.52 below lsd, July 25, 1951; lowest 24.87 below lsd, Nov. 28, 1947. Records available: 1947-51. Jan. 23, 21.41; Mar. 17, 21.06; May 11, 21.53; July 25, 6.52; Aug. 21, 9.73; Oct. 22, 10.54; Dec. 27, 13.43.

12-7-18aa. Reverend Hendrickson. Drilled observation water-table well in alluvium, diameter 6 inches, depth 50 feet. Highest water level 2.47 below lsd, July 25, 1951; lowest 23.55, below lsd, May 26, 1950. Records available: 1947-51. Jan. 23, 21.74; Mar. 17, 20.29; May 11, 21.30; July 25, 2.47; Aug. 21, 8.71; Oct. 22, 11.70; Dec. 27, 15.73.

12-7-19dd. H. R. Behern. Dug stock and observation water-table well in alluvium, diameter 36 inches, depth 16 feet, cribbed with rock. Highest water level 7.53 below lsd, Oct. 23, 1951; lowest 13.18 below lsd, Jan. 12, 1948. Records available: 1947-51. Jan. 23, 10.89; Mar. 17, 10.19; May 11, 10.15; July 25, 7.55; Aug. 21, 8.06; Oct. 23, 7.53; Dec. 27, 8.55.

12-7-23aa. R. E. Ancell. Dug observation water-table well in terrace gravel, diameter 36 inches, depth 18 feet, cribbed with rock. Highest water level 1.60 below lsd, July 25, 1951; lowest 13.43 below lsd, Jan. 12, 1948. Records available: 1947-51. Mar. 17, 9.30; May 11, 11.29; July 25, 1.60; Aug. 21, 3.45; Oct. 22, 3.69; Dec. 27, 5.41.

12-7-34ad. A. Rittman. Dug observation water-table well in Dakota formation, diameter 4 feet, depth 56 feet, cribbed with rock. Highest water level 48.60 below lsd, Dec. 27, 1951; lowest 50.84 below lsd, Feb. 21, 1947. Records available: 1947-51. Jan. 23, 50.60; Mar. 17, 50.28; May 11, 50.63; Aug. 21, 49.50; Oct. 22, 48.75; Dec. 27, 48.60.

12-8-6aa. Darrel Dean. Drilled domestic and observation water-table well in alluvium, diameter 6 inches, depth 19 feet. Highest water level 5.09 below lsd, May 11, 1951; lowest 10.53 below lsd, Sept. 8, 1947. Records available: 1947-51. Jan. 23, 6.09; Mar. 17, 5.98; May 11, 5.09; July 25, 6.96; Aug. 21, 5.16; Oct. 22, 5.15; Dec. 27, 5.40.

12-8-8cd. S. C. Meredith. Dug observation water-table well in Dakota formation, diameter 4 feet, depth 34 feet, cribbed with rock. Highest water level 2.29 below lsd, July 25, 1951; lowest 14.30 below lsd, Jan. 12, 1948. Records available: 1947-51. Jan. 23, 12.03; Mar. 17, 12.37; May 11, 7.25; July 25, 2.29; Aug. 21, 4.02; Oct. 22, 2.92; Dec. 27, 3.43.

12-8-11cb. Jim and Ed Herby. Dug domestic stock and observation water-table well in alluvium, diameter 4 feet, depth 32 feet, cribbed with rock. Highest water level 4.76 below lsd, July 25, 1951; lowest 19.48 below lsd, Mar. 17, 1951. Records available: 1947-51. Jan. 23, 14.46; Mar. 17, 19.48; May 11, 17.67; July 25, 4.76; Aug. 21, 12.50; Oct. 22, 14.68; Dec. 27, 16.45.

12-9-10ad. Harry Cromwell. Drilled observation water-table well in alluvium, diameter 6 inches, depth 31 feet. Highest water level 6.41 below lsd, Oct. 22, 1951; lowest 20.26 below lsd, Jan. 12 and Apr. 6, 1948. Records available: 1947-51. Jan. 23, 18.08; Oct. 22, 6.41; Dec. 27, 9.46.

12-10-8bb. G. Meitler. Drilled stock and observation water-table well in alluvium, diameter 6 inches, depth 30 feet. Highest water level 9.58 below lsd, Oct. 22, 1951; lowest 16.58 below lsd, Jan. 12, 1948. Records available: 1947-51. Jan. 23, 14.67; Mar. 17, 14.80; May 11, 13.25; Oct. 22, 9.58.

12-10-13aa. Soenger Estate. Drilled stock and observation water-table well in alluvium, diameter 6 inches, depth 30 feet. Highest water level 8.62 below lsd, July 25, 1951; lowest 24.48 below lsd, Jan. 12, 1948. Records available: 1947-51. Jan. 23, 19.07; Mar. 17, 20.05; May 11, 18.53; July 25, 8.62; Aug. 21, 9.64; Oct. 22, 9.22; Dec. 27, 10.42.

12-10-17ab. Gorge School district. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 17, T. 12 S., R. 10 W. Drilled well, diameter 6 inches, depth 45 feet. Records available: 1947-50. Measurement discontinued.

12-10-21dd. F. D. Meyer. Dug domestic and stock water-table well in alluvium, diameter 4 feet, depth 32 feet, cribbed with rock. Highest water level 19.58 below lsd, Oct. 22, 1951; lowest 27.85 below lsd, Apr. 26, 1949. Records available: 1947-51. Jan. 23, 26.10; Mar. 17, 26.28; May 11, 26.13; Aug. 21, 20.29; Oct. 22, 19.58; Dec. 27, 20.59.

#### Linn County

19-24-36aa. Mr. Newby. Dug unused water-table well in Swope limestone, diameter 6 feet, depth 21 feet. Highest water level 9.12 below lsd, Sept. 28, 1951; lowest 14.13 below lsd, Dec. 29, 1950. Records available: 1948-51. Apr. 18, 10.35; Aug. 2, 9.87; Sept. 28, 9.12; Nov. 30, 6.56.

22-25-6cb. E. C. Smith. Dug unused water-table well in Nowata shale and Altamont limestone, diameter 5 feet, depth 16 feet, cribbed with rock. Highest water level 3.05 below lsd, Nov. 30, 1951; lowest 14.62 below lsd, Dec. 29, 1950. Records available: 1948-51. Apr. 18, 13.54; Aug. 2, 6.48; Sept. 28, 3.30; Nov. 30, 3.05.

23-25-7daa. O. M. Grigsby. Dug unused water-table well in Bandera shale, diameter 36 inches, depth 19 feet, cribbed with rock. Highest water level 1.64 below lsd, Mar. 1, 1949; lowest 17.21 below lsd, May 5, 1948. Records available: 1948-51. Apr. 18, 15.75; Aug. 2, 8.53; Sept. 28, 8.26; Nov. 30, 10.73.

#### Logan County

1. Octon Estate. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 11 S., R. 32 W. Drilled unused water-table well in Ogallala formation, diameter 5 inches, depth 107 feet. Highest water level 96.42 below lsd, Jan. 22, 1944; lowest 99.29 below lsd, Jan. 6, 1947. Records available: 1942-51. Jan. 8, 97.20; Apr. 23, 96.85; July 18, 96.77; Oct. 17, 96.95.

#### McPherson County

17-3-17dd. U. S. Geol. Survey. Drilled observation water-table well in alluvium, diameter 1 $\frac{1}{4}$  inches, depth 39 feet. Highest water level 16.75 below lsd, July 24, 1951; lowest 26.39 below lsd, Mar. 6, 1950. Records available: 1946-51. Jan. 24, 25.10; Mar. 15, 25.58; May 16, 24.93; July 24, 16.75; Aug. 18, 17.49; Oct. 1, 17.60; Nov. 9, 19.94.

17-3-18dd. U. S. Geol. Survey. Drilled observation water-table well in alluvium, diameter 1 $\frac{1}{4}$  inches, depth 53 feet. Highest water level 17.25 below lsd, Oct. 1, 1951; lowest 28.40 below lsd, Jan. 6, 1948. Records available: 1946-51. Jan. 24, 25.08; Mar. 15, 25.65; May 16, 25.01; July 24, 17.60; Aug. 17, 17.38; Oct. 1, 17.25; Nov. 9, 18.88.

17-3-30dd. U. S. Geol. Survey. Drilled observation water-table well in alluvium, diameter  $1\frac{1}{4}$  inches, depth 57 feet. Highest water level 19.09 below lsd, July 24, 1951; lowest 31.36 below lsd, Jan. 6, 1948. Records available: 1946-51. Jan. 24, 28.33; Mar. 15, 29.04; May 16, 29.70; July 24, 19.09; Aug. 20, 19.25; Oct. 1, 19.54; Nov. 9, 20.82.

17-4-25dd. U. S. Geol. Survey. Drilled observation water-table well in alluvium, diameter  $1\frac{1}{4}$  inches, depth 50 feet. Highest water level 15.11 below lsd, July 24, 1951; lowest 26.15 below lsd, Nov. 20, 1950. Records available: 1946-51. Jan. 24, 22.68; Mar. 15, 23.01; May 16, 22.72; July 24, 15.11; Aug. 20, 15.44; Oct. 1, 15.52; Nov. 1, 16.42.

#### Meade County

33. W. L. Woodruff. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 34, T. 33 S., R. 26 W. Highest water level 37.33 below lsd, Nov. 23, 1942; lowest 38.75 below lsd, Nov. 3, 1943. Records available: 1939-49. Measurement discontinued.

34. District School. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 17, T. 33 S., R. 27 W. Drilled public supply water-table well in Ogallala formation, diameter 6 inches, depth 169 feet. Highest water level 143.28 below lsd, Dec. 14, 1944; lowest 150.39 below lsd, Oct. 29, 1939. Records available: 1939-51. June 19, 146.70. Measurement discontinued.

45. Joseph Rocke. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 31, T. 30 S., R. 27 W. Drilled unused water-table well in Meade and Ogallala formations, diameter 3 inches, depth 200 feet. Highest water level 0.42 below lsd, Dec. 20, 1949; lowest 4.10 below lsd, Aug. 31, 1949. Records available: 1939-51. Mar. 9, 2.14; June 19, 0.51; Sept. 18, 1.90; Dec. 18, 1.35.

61. John Meyer. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 26, T. 31 S., R. 27 W. Drilled unused water-table well in Meade and Ogallala formations, diameter 6 inches, depth 87 feet. Highest water level 57.14 below lsd, Dec. 18, 1951; lowest 60.77 below lsd, May 17, 1940. Records available: 1939-51. Mar. 19, 57.80; Sept. 19, 57.30; Dec. 18, 57.14.

77. J. W. Wood. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 4, T. 32 S., R. 28 W. Drilled unused water-table well in Meade and Ogallala formations, diameter 3 inches, depth 126 feet. Highest water level 60.38 below lsd, Dec. 26, 1950; lowest 67.12 below lsd, Sept. 9, 1943. Records available: 1939-51. Sept. 18, 60.64. Measurement discontinued.

234. Chris Sobba. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 23, T. 30 S., R. 27 W. Drilled unused water-table well in Ogallala formation, diameter 16 inches, depth 210 feet. Highest water level 11.47 below lsd, July 8-11, 1951; lowest 15.57 below lsd, Aug. 31, 1939. Records available: 1939-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	12.24	12.38	12.57	.....	12.32	11.91	11.52	13.01	15.24	12.09	11.79	11.65
2	12.23	12.37	12.63	.....	12.33	11.92	11.50	.....	15.17	12.16	11.79	11.68
3	12.25	12.33	12.69	12.37	12.36	11.92	11.51	.....	14.32	12.17	11.71	11.68
4	12.27	12.33	12.72	12.37	12.46	11.92	11.51	.....	14.59	.....	11.71	11.64
5	12.30	12.30	12.72	12.35	12.56	11.89	11.48	.....	14.57	.....	11.72	11.65
6	12.32	12.36	12.83	12.36	12.61	11.85	11.49	.....	14.09	.....	11.72	11.75
7	12.31	12.37	12.83	12.38	12.60	11.84	11.49	.....	13.77	.....	11.73	11.76
8	12.28	12.36	12.77	12.36	12.55	11.84	11.47	.....	13.44	.....	11.70	11.77
9	12.28	12.36	12.73	12.35	12.55	11.87	11.47	.....	13.17	.....	11.69	11.73
10	12.29	12.31	12.56	12.34	12.57	11.83	11.47	16.47	12.98	.....	11.68	11.73
11	12.26	12.31	12.56	12.34	12.57	11.87	11.47	16.31	12.79	.....	11.65	11.68
12	12.27	12.33	12.56	12.33	12.53	11.75	11.48	16.12	12.64	.....	11.60	11.70
13	12.28	12.39	12.49	12.32	12.50	11.75	11.49	15.51	12.58	.....	11.63	11.74
14	12.28	12.39	12.45	12.28	12.48	11.76	11.48	15.75	12.50	.....	11.63	11.74
15	12.29	12.37	12.43	12.31	12.44	11.72	11.48	16.00	12.42	.....	11.68	11.74
16	12.26	12.31	12.40	12.31	12.29	11.71	11.49	16.41	12.37	.....	11.78	11.72
17	12.26	12.29	12.47	12.28	12.21	11.72	11.50	16.48	12.28	.....	11.78	11.69
18	12.27	12.28	12.49	12.28	12.19	11.72	11.50	16.53	12.23	.....	11.74	11.71
19	12.28	12.31	12.49	12.29	12.14	11.70	12.27	16.53	12.16	.....	11.72	11.65
20	12.37	12.34	12.45	12.25	12.12	11.70	.....	15.89	12.11	12.11	11.69	11.69
21	12.37	12.34	12.44	12.29	12.11	11.70	.....	15.77	12.18	12.00	11.69	11.71
22	12.30	12.36	12.39	12.32	12.06	11.70	.....	14.76	12.20	12.00	11.69	11.72
23	12.32	12.48	12.47	12.29	12.02	11.70	.....	14.19	12.19	12.26	11.97	11.72
24	12.68	12.56	12.45	12.24	11.99	11.69	.....	13.80	12.27	11.95	11.72	11.76
25	12.72	12.57	12.43	12.31	11.95	11.68	.....	13.54	12.28	11.90	11.73	11.79
26	12.71	12.57	12.41	12.40	11.96	11.65	.....	13.31	12.21	11.88	11.73	11.82
27	12.54	12.54	12.32	12.46	11.94	11.64	13.39	13.10	12.18	11.88	11.72	11.82
28	12.50	12.56	.....	12.44	11.93	11.64	13.09	14.07	12.16	11.88	11.71	11.74
29	12.49	.....	12.37	11.90	11.59	12.54	14.70	12.08	11.80	11.71	11.70	11.70
30	12.46	.....	12.32	11.90	11.53	13.03	14.95	12.10	11.79	11.70	11.70	11.70
31	12.38	.....	.....	.....	11.88	13.30	15.21	.....	11.79	.....	11.75	11.75

Miami County

16-25-5ccc. C. E. Moews. Dug unused water-table well in Plattsburg limestone and Bonner Springs shale, diameter 8 feet, depth 18 feet, cribbed with rock. Highest water level 2.64 below lsd, Mar. 1, 1949; lowest 5.35 below lsd, Oct. 15, 1948. Records available: 1948-51. Apr. 18, 2.78; Aug. 2, 2.97; Sept. 28, 3.01; Nov. 30, 2.93. Measurement discontinued.

Mitchell County

6-8-34ccc. R. L. Metcalf. Dug domestic and stock water-table well, diameter 36 inches, depth 24 feet, cribbed with stone. Highest water level 16.00 below lsd, July 25, 1951; lowest 18.59 below lsd, Feb. 7, 1950. Records available: 1946-51. Jan. 22, 17.60; Mar. 19, 17.19; May 11, 16.89; July 25, 16.00; Aug. 28, 17.14; Oct. 24, 16.32; Dec. 12, 16.91.

6-9-27ab. L. Lowdermilk. Dug unused water-table well, diameter 4 feet, depth 37 feet, cribbed with rock. Highest water level 11.90 below lsd, July 25, 1951; lowest 31.10 below lsd, May 11, 1935. Records available: 1935-51. Jan. 22, 28.00; Mar. 19, 24.53; May 11, 25.37; July 25, 11.90; Aug. 28, 16.68; Oct. 24, 18.15; Dec. 12, 19.04.

6-9-30da. M. D. Vint. Drilled domestic and stock well in alluvium, diameter 6 inches, depth 37 feet. Highest water level 17.90 below lsd, July 25, 1951; lowest 29.30 below lsd, Nov. 29, 1948. Records available: 1946-51. Jan. 22, 24.88; Mar. 19, 24.90; May 11, 25.39; July 25, 17.90; Aug. 28, 18.42; Oct. 24, 20.02; Dec. 12, 21.18.

7-6-30bcc. Dan F. Gise. Dug domestic and stock water-table well in alluvium, diameter 4 feet, depth 35 feet, cribbed with stone. Highest water level 6.63 below lsd, July 25, 1951; lowest 30.40 below lsd, Feb. 7, 1950. Records available: 1946-51. Jan. 22, 25.65; Mar. 19, 25.83; May 11, 25.13; July 25, 6.63; Aug. 29, 14.09; Oct. 25, 18.97; Dec. 12, 19.57.

7-6-34cba. Thelma Spicker. Drilled stock and observation water-table well in alluvium, diameter 6 inches, depth 43 feet. Highest water level 15.75 below lsd, Oct. 25, 1951; lowest 32.19 below lsd, Nov. 29, 1948. Records available: 1946-51. Jan. 22, 24.90; Mar. 19, 25.58; May 11, 25.15; Oct. 25, 15.75; Dec. 12, 19.07.

7-7-7aaa. A. McDysan. Drilled domestic, stock, and observation water-table well in Greenhorn limestone, diameter 6 inches, depth 43 feet. Highest water level 16.05 below lsd, Jan. 22, 1951; lowest 30.35 below lsd, Apr. 21, 1949. Records available: 1946-51. Jan. 22, 16.05; Mar. 19, 26.79; May 11, 27.40; July 25, 19.40; Aug. 28, 21.17; Oct. 24, 21.89; Dec. 12, 22.44.

7-7-15dcc. V. R. Schmidt. Dug observation water-table well in alluvium, diameter 4 feet, depth 28 feet, cribbed with stone. Highest water level 0.55 below lsd, July 25, 1951; lowest 22.90 below lsd, May 27, 1948. Records available: 1946-51. Jan. 22, 18.61; Mar. 19, 18.47; May 11, 18.65; July 25, 0.55; Aug. 29, 3.23; Oct. 25, 5.50; Dec. 12, 7.80.

7-8-5ccb. Paul Meers. Drilled stock water-table well in alluvium, diameter 6 inches, depth 47 feet. Highest water level 17.55 below lsd, Aug. 28, 1951; lowest 29.18 below lsd, Nov. 29, 1948. Records available: 1946-51. Jan. 22, 25.29; Mar. 19, 25.99; May 11, 25.95; Aug. 28, 17.55; Oct. 24, 20.60; Dec. 12, 22.23.

7-9-2bcc. F. Day. Drilled domestic and stock water-table well in alluvium, diameter 12 inches, depth 45 feet, tile casing. Highest water level 8.97 below lsd, July 25, 1951; lowest 33.10 below lsd, June 3, 1950. Records available: 1946-51. Jan. 22, 26.91; Mar. 19, 27.89; May 11, 28.10; July 25, 8.97; Aug. 28, 16.55; Oct. 24, 19.45; Dec. 12, 21.88.

7-10-10ccc. J. P. Kaster. Drilled stock and observation water-table well, diameter 12 inches, depth 41 feet, tile casing. Highest water level 21.55 below lsd, July 25, 1951; lowest 26.84 below lsd, Oct. 14, 1946. Records available: 1946-51. Jan. 22, 25.20; Mar. 19, 25.50; May 11, 25.17; July 25, 21.55; Aug. 28, 22.31; Oct. 24, 23.14; Dec. 12, 23.40.

8-6-12dda. Mrs. R. E. McKee. Dug domestic and stock water-table well in alluvium, diameter 4 feet, depth 35 feet, cribbed with stone. Highest water level 22.43 below lsd, July 25, 1951; lowest 34.13 below lsd, Sept. 29, 1947. Records available: 1946-51. Jan. 22, 32.10; Mar. 19, 32.59; May 11, 32.50; July 25, 22.43; Oct. 25, 27.35; Dec. 12, 28.63.

Morton County

22. E. A. Wilcox. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 14, T. 31 S., R. 43 W. Drilled unused water-table well in Dakota formation, diameter 5 inches, depth 87 feet. Highest water level 70.08 below lsd, Nov. 29, 1951; lowest 74.43 below lsd, Nov. 26, 1947. Records available: 1939-51. Feb. 22, 70.69; Aug. 23, 70.37; Nov. 29, 70.08.

65. John Hentschel.  $SE\frac{1}{4}SE\frac{1}{4}NE\frac{1}{4}$  sec. 8, T. 33 S., R. 42 W. Drilled unused water-table well in Ogallala formation, diameter 5 inches, depth 62 feet. Highest water level 50.40 below lsd, Aug. 23, 1951; lowest 54.15 below lsd, Mar. 13, 1941. Records available: 1939-51. Feb. 22, 50.64; May 10, 51.00; Aug. 23, 50.40; Nov. 29, 50.71.

117. W. C. Washburn.  $SW\frac{1}{4}SW\frac{1}{4}$  sec. 4, T. 35 S., R. 42 W. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 216 feet. Highest water level 158.86 below lsd, Aug. 23, 1951; lowest 166.54 below lsd, May 25, 1948. Records available: 1939-51. Feb. 22, 158.38; May 10, 159.23; Aug. 23, 158.86.

#### Ness County

1. J. E. Ficken.  $NE\frac{1}{4}SW\frac{1}{4}$  sec. 32, T. 20 S., R. 23 W. Drilled irrigation water-table well in alluvium, diameter 19 inches, depth 70 feet. Highest water level 25.58 below lsd, Oct. 24, 1951; lowest 34.91 below lsd, Aug. 27, 1940. Records available: 1940-51. Jan. 24, 28.33; Apr. 10, 28.70; July 12, 25.80; Oct. 24, 25.58.

2. C. L. Whitley.  $SW\frac{1}{4}$  sec. 20, T. 20 S., R. 22 W. Dug and drilled irrigation water-table well in alluvium, diameter 20 inches, depth 58 feet. Highest water level 17.81 below lsd, July 12, 1951; lowest 27.03 below lsd, Apr. 18, 1950. Records available: 1940-51. Jan. 24, 21.26; Apr. 18, 21.55; July 12, 17.81; Oct. 24, 19.60.

#### Norton County

1-21-35dc. H. S. Whitaker. Dug irrigation and observation water-table well in alluvium, diameter 34 inches, depth 48 feet, iron casing. Highest water level 27.45 below lsd, Aug. 26, 1951; lowest 33.74 below lsd, Oct. 7, 1948. Records available: 1946-51. Jan. 18, 35.28; Mar. 21, 29.00; May 15, 29.97; July 23, 28.40; Aug. 26, 27.45; Oct. 23, 28.16; Dec. 11, 28.43.

2-21-1bb. Verner Ross. Drilled irrigation water-table well in alluvium, diameter 24 inches, depth 70 feet. Highest water level 18.76 below lsd, July 23, 1951; lowest 28.24 below lsd, Jan. 18, 1951. Records available: 1946-51. Jan. 18, 28.24; Mar. 21, 23.63; May 15, 22.54; July 23, 18.76; Aug. 26, 19.00; Oct. 23, 20.72; Dec. 11, 20.54.

2-21-2bd. Vernon J. Hamilton. Drilled irrigation water-table well in alluvium, diameter 24 inches, depth 57 feet. Highest water level 17.69 below lsd, Aug. 26, 1951; lowest 26.19 below lsd, Oct. 7, 1948. Records available: 1946-51. Jan. 18, 23.49; Mar. 21, 23.59; May 15, 25.10; July 23, 18.34; Aug. 26, 17.69; Dec. 11, 21.55.

2-21-11aa. W. B. Woods. Drilled irrigation water-table well in alluvium, diameter 18 inches, depth 82 feet. Highest water level 24.37 below lsd, Oct. 23, 1951; lowest 34.85 below lsd, Oct. 7, 1948. Records available: 1945-51. Jan. 18, 30.26; Mar. 21, 28.90; May 15, 29.85; Oct. 23, 24.37; Dec. 11, 24.87.

2-21-18aa. Mr. Hrypkema. Dug unused water-table well in terrace deposits, diameter 12 feet, depth 57 feet. Highest water level 40.46 below lsd, Dec. 11, 1951; lowest 43.48 below lsd, Feb. 9, 1950. Records available: 1947-51. Jan. 18, 42.74; Mar. 21, 42.50; May 15, 42.19; July 23, 41.34; Aug. 26, 40.69; Oct. 23, 40.47; Dec. 11, 40.46.

2-21-19dd. C. C. Alexander. Drilled domestic and stock water-table well in Ogallala formation, diameter 6 inches, depth 78 feet. Highest water level 59.10 below lsd, May 15, 1951; lowest 65.93 below lsd, Jan. 18, 1951. Records available: 1946-51. Jan. 18, 65.93; Mar. 21, 62.83; May 15, 59.10; July 23, 62.73; Aug. 26, 62.67; Oct. 23, 62.71; Dec. 11, 62.67.

2-22-11dc. K. Wilmot. Drilled domestic water-table well in Ogallala formation, diameter 6 inches, depth 79 feet. Highest water level 60.49 below lsd, Dec. 11, 1951; lowest 67.35 below lsd, May 7, 1947. Records available: 1946-51. Jan. 18, 60.52; Mar. 21, 60.75; May 15, 63.09; July 23, 60.74; Aug. 26, 60.73; Oct. 23, 60.57; Dec. 11, 60.49.

2-22-26ac. Percy G. Whitaker. Drilled domestic water-table well in alluvium, diameter 6 inches, depth 53 feet. Highest water level 24.11 below lsd, July 24, 1951; lowest 29.80 below lsd, Apr. 26, 1949. Records available: 1946-51. Jan. 18, 28.55; May 15, 28.46; July 24, 24.11; Aug. 26, 26.24; Oct. 23, 26.78; Dec. 12, 27.02.

2-22-28aa. H. E. Fisher. Drilled observation water-table well in terrace deposits, diameter 5 inches, depth 51 feet. Highest water level 47.30 below lsd, July 31, 1947; lowest 49.70 below lsd, Sept. 2, 1949. Records available: 1947-51. Jan. 18, 48.64; Mar. 21, 48.89; May 15, 48.65; July 24, 48.59; Aug. 26, 48.61; Oct. 23, 48.56; Dec. 12, 48.52.

2-23-36cd. R. L. Brooks. Drilled irrigation water-table well in alluvium, diameter 18 inches, depth 69 feet. Highest water level 25.56 below lsd, Oct. 23, 1951; lowest 31.59 below lsd, Mar. 13, 1950. Records available: 1946-51. Jan. 18, 27.14; Mar. 21, 27.53; May 15, 27.11; July 24, 25.82; Aug. 26, 25.87; Oct. 23, 25.56; Dec. 12, 25.79.

3-23-8aa. Mary J. Rogers. Drilled observation water-table well in terrace deposits, diameter 6 inches, depth 59 feet. Highest water level 33.46 below lsd, July 24, 1951; lowest 39.15 below lsd, Jan. 18, 1951. Records available: 1947-51. Jan. 18, 39.15; Mar. 21, 37.60; May 15, 38.58; July 24, 33.46; Aug. 26, 34.17; Oct. 23, 34.99; Dec. 11, 36.35.

Osborne County

6-11-34aa. Wm. E. Lowdon. Dug unused water-table well in terrace alluvium, diameter 28 inches, depth 41 feet, cribbed with rock. Highest water level 28.44 below lsd, Dec. 10, 1951; lowest 37.07 below lsd, June 11, 1946. Records available: 1945-51. Jan. 19, 33.05; Mar. 20, 33.27; May 14, 33.09; July 25, 30.61; Aug. 28, 29.48; Oct. 24, 28.48; Dec. 10, 28.44.

6-11-36aa. J. M. Irey. NE<sub>4</sub>NE<sub>4</sub> sec. 36, T. 6 S., R. 11 W. Drilled unused well, diameter 8 inches, depth 35 feet. Records available: 1945-48. Measurement discontinued.

6-12-20bb. C. M. Storer. Drilled stock and observation water-table well in terrace gravels, diameter 12 inches, depth 55 feet, tile casing. Highest water level 34.80 below lsd, July 24, 1951; lowest 43.06 below lsd, Jan. 28, 1946. Records available: 1945-51. Jan. 19, 37.56; Mar. 20, 39.27; May 14, 38.66; July 24, 34.80; Aug. 27, 35.13; Oct. 22, 35.28; Dec. 10, 35.29.

6-12-23cd. C. Fink. Dug domestic water-table well in terrace gravels, diameter 36 inches, depth 32 feet, cribbed with rock. Highest water level 16.68 below lsd, July 24, 1951; lowest 27.17 below lsd, Apr. 26, 1946. Records available: 1945-51. Jan. 19, 23.05; Mar. 20, 23.24; May 14, 24.25; July 24, 16.68; Aug. 26, 17.74; Oct. 22, 17.99; Dec. 10, 18.50.

6-13-12ba. F. L. Smith. Drilled domestic and stock water-table well in alluvium, diameter 8 inches, depth 48 feet, wood casing. Highest water level 33.48 below lsd, Oct. 22, 1951; lowest 42.37 below lsd, Mar. 20, 1951. Records available: 1945-51. Jan. 19, 39.47; Mar. 20, 42.37; May 14, 34.87; July 24, 34.55; Aug. 27, 34.28; Oct. 22, 33.48; Dec. 10, 33.77.

7-11-26aa. W. Sharp. Drilled domestic and stock water-table well in alluvium, diameter 7 inches, depth 27 feet. Highest water level 13.20 below lsd, Jan. 19, 1951; lowest 26.42 below lsd, Nov. 15, 1950. Records available: 1946-51. Jan. 19, 13.20; Mar. 19, 13.66; June 12, 14.70.

7-12-28ab. C. E. Galley. Drilled domestic and stock water-table well in alluvium, diameter 12 inches, depth 47 feet, tile casing. Highest water level 27.09 below lsd, Oct. 24, 1951; lowest 34.60 below lsd, Jan. 7, 1947. Records available: 1946-51. Jan. 19, 30.49; Mar. 19, 30.80; June 12, 30.89; July 25, 27.41; Aug. 27, 27.26; Oct. 24, 27.09; Dec. 12, 27.21.

7-13-15da. J. W. Bathurst. Drilled domestic and observation water-table well in alluvium, diameter 12 inches, depth 52 feet, tile casing. Highest water level 29.14 below lsd, July 25, 1951; lowest 38.94 below lsd, Sept. 30, 1947, Apr. 23, 1949. Records available: 1946-51. Mar. 19, 37.65; June 12, 37.50; July 25, 29.14; Aug. 27, 33.12; Oct. 23, 34.83; Dec. 12, 35.53.

7-14-6cb. J. A. Guttery. Drilled stock and observation water-table well in alluvium, diameter 12 inches, depth 29 feet, tile casing. Highest water level 19.97 below lsd, Aug. 27, 1951; lowest 24.19 below lsd, Nov. 29, 1948. Records available: 1946-51. Jan. 19, 23.62; Mar. 19, 22.63; June 12, 21.99; July 25, 19.98; Aug. 27, 19.97; Oct. 23, 20.68; Dec. 12, 21.02.

7-14-10dd. John Clark. Drilled domestic and observation water-table well in alluvium, diameter 12 inches, depth 38 feet, tile casing. Highest water level 29.93 below lsd, Sept. 21, 1950; lowest 33.18 below lsd, Dec. 9, 1946. Records available: 1946-51. Jan. 19, 30.35; Mar. 19, 30.59; June 12, 30.58.

7-15-8cc. F. Dibble. Dug domestic and stock water-table well in alluvium, diameter 4 feet, depth 26 feet, cribbed with stone. Highest water level 14.80 below lsd, May 26, 1950; lowest 27.75 below lsd, Apr. 12, 1950. Records available: 1946-51. Jan. 19, 22.08; Mar. 19, 23.84; June 12, 22.55; July 25, 19.09; Aug. 27, 18.55; Oct. 23, 18.95; Dec. 12, 19.53.

7-15-12dc. Tom Hale, Jr. Drilled domestic and stock water-table well, diameter 12 inches, depth 36 feet, tile casing. Highest water level 10.60 below lsd, June 29, 1949; lowest 23.85 below lsd, Apr. 12, 1950. Records available: 1946-51. Jan. 19, 11.76; Mar. 19, 14.67; June 12, 13.83; Dec. 12, 10.74.

Pawnee County

7. Ralph Lupfer. NE<sub>4</sub>NE<sub>4</sub> sec. 18, T. 22 S., R. 17 W. Drilled irrigation water-table well in alluvium, diameter 19 inches, depth 123 feet. Highest water level 18.95 below lsd, June 25, 1951; lowest 29.17 below lsd, Jan. 20, 1948. Records available: 1940-51.

7--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	23.10	Apr. 16	23.50	July 10	19.42	Oct. 22	21.38
Feb. 12	23.21	May 14	23.10	Aug. 20	20.30	Nov. 21	21.68
Mar. 21	23.38	June 25	18.95	Sept. 24	20.85	Dec. 12	21.89

8. F. B. Reed. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, T. 22 S., R. 16 W. Drilled irrigation water-table well in alluvium, diameter 19 inches, depth 33 feet. Highest water level 7.01 below lsd, Aug. 29, 1950; lowest 18.32 below lsd, Sept. 20, 1940. Records available: 1940-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	11.12	Apr. 16	12.02	Sept. 24	9.78	Nov. 21	11.28
Feb. 12	11.62	Aug. 20	8.18	Oct. 22	10.79	Dec. 12	11.54
Mar. 21	11.92						

14. B. Unruh. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 21 S., R. 15 W. Driven unused domestic and stock well, diameter 1 $\frac{1}{2}$  inches, depth 30 feet. Records available: 1944-49. Measurement discontinued.

Phillips County

1-19-19cc. Al Skelton. Dug stock and observation water-table well in Ogallala formation, diameter 10 to 8 feet, depth 33 feet. Highest water level 11.38 below lsd, Oct. 23, 1951; lowest 26.01 below lsd, Nov. 19, 1950. Records available: 1947-51. Jan. 18, 15.06; Mar. 21, 12.37; May 15, 19.00; July 23, 14.65; Aug. 26, 12.04; Oct. 23, 11.38; Dec. 11, 11.79.

1-20-13ad. A. C. Van Kooten. Drilled observation water-table well in terrace deposits, diameter 6 inches, depth 63 feet. Highest water level 20.15 below lsd, Sept. 22, 1950; lowest 29.35 below lsd, Oct. 8, 1948. Records available: 1947-51. Jan. 18, 28.09. Measurement discontinued.

1-20-30cc. C. C. Williams. Drilled unused water-table well in Ogallala formation, diameter 5 inches, depth 85 feet. Highest water level 76.69 below lsd, Jan. 18, 1951; lowest 79.16 below lsd, Nov. 19, 1950. Records available: 1947-51. Jan. 18, 76.69; Mar. 21, 77.45; May 15, 78.42; July 23, 76.80; Aug. 26, 76.85; Oct. 23, 76.92; Dec. 11, 77.03.

4-17-25cd. Minnie Gray. Drilled domestic and stock water-table well in high terrace gravel, diameter 10 inches, depth 91 feet. Highest water level 76.19 below lsd, Aug. 27, 1951; lowest 86.27 below lsd, Sept. 25, 1946. Records available: 1946-48, 1950-51. Jan. 19, 84.00; Mar. 20, 81.28; May 14, 84.85; July 24, 77.63; Aug. 27, 76.19; Oct. 22, 76.69.

4-17-31bc. C. B. Brower. Drilled domestic and stock water-table well in terrace gravels, diameter 8 inches, depth 61 feet, tile casing. Highest water level 47.15 below lsd, Aug. 27, 1951; lowest 52.72 below lsd, Oct. 6, 1948. Records available: 1946-51. Jan. 19, 50.2; Mar. 20, 49.23; May 14, 49.39; Aug. 27, 47.15; Oct. 22, 47.58; Dec. 11, 47.36.

4-18-30ab. Sutley Estate. Dug unused water-table well in alluvium, depth 36 feet. Highest water level 4.76 below lsd, July 25, 1951; lowest 20.29 below lsd, Sept. 25, 1946. Records available: 1945-51. Jan. 19, 12.23; May 14, 12.80; July 25, 4.76; Aug. 27, 5.42; Dec. 11, 6.92.

4-19-35ab. Glenn Seeger. Drilled domestic and stock water-table well in alluvium, diameter 10 inches, depth 35 feet. Highest water level 8.73 below lsd, Dec. 11, 1951; lowest 15.78 below lsd, Jan. 19, 1951. Records available: 1946-51. Jan. 19, 15.78; May 14, 10.30; July 24, 9.84; Aug. 27, 9.45; Oct. 23, 8.76; Dec. 11, 8.73.

4-20-21cc. Fred Albrecht. Drilled domestic and observation water-table well in Sanborn formation, diameter 8 inches, depth 152 feet. Highest water level 47.75 below lsd, May 14, 1951; lowest 48.92 below lsd, Feb. 6, 1946. Records available: 1946-51. Jan. 19, 48.60; Mar. 20, 48.15; May 14, 47.75; July 24, 48.03; Aug. 27, 47.98; Oct. 22, 47.98; Dec. 11, 47.87.

5-16-3aa. M. W. Hardman. Dug unused well, diameter 30 inches, depth 49 feet. Records available: 1945-49. Measurement discontinued.

5-17-1aa. Phillips County. Drilled observation water-table well in alluvium, diameter 4 inches, depth 34 feet, iron pipe casing. Highest water level 0.60 below lsd, May 14, 1951; lowest 7.60 below lsd, Nov. 21, 1945. Records available: 1945-51. Mar. 20, 1.1; May 14, 0.6. Measurement discontinued.

5-17-3cd. Mrs. V. Van Ellen and others. Dug unused water-table well in alluvium, diameter 5 feet, depth 66 feet, cribbed with rock. Highest water level 1.18 below lsd, May 6, 1947; lowest 27.00 below lsd, June 12, 1946. Records available: 1945-51. Jan. 19, 4.08; Mar. 20, 3.99; Oct. 22, 1.69.

5-17-12aa. E. R. Downing and others. Dug domestic and stock water-table well in Sanborn formation, diameter 36 inches, depth 55 feet. Highest water level 46.29 below lsd, May 14, 1951; lowest 54.20 below lsd, Sept. 30, 1947. Records available: 1946-51. Jan. 19, 51.85; Mar. 20, 48.99; May 14, 46.29; July 24, 50.83; Aug. 27, 50.79; Oct. 22, 50.54; Dec. 11, 50.43.

#### Pratt County

26-13-5ada. Z. K. Russell. Drilled industrial water-table well in dune sand of Quaternary age and Ogallala formation, diameter 8 inches, depth 51 feet. Highest water level 1.03 below lsd, June 10, 1951; lowest 4.50 below lsd, June 14, 1950. Records available: 1950-51. Mar. 20, 3.70; June 10, 1.03. Measurement discontinued.

26-13-33bad. E. R. Taylor. Drilled industrial and observation water-table well in dune sand of Quaternary age and Ogallala formation, diameter 8 inches, depth 73 feet. Highest water level 33.20 below lsd, Nov. 20, 1951; lowest 37.55 below lsd, June 14, 1950. Records available: 1950-51. Mar. 20, 36.59; June 10, 35.17; June 20, 35.84; Aug. 20, 34.70; Oct. 22, 33.43; Nov. 20, 33.20; Dec. 20, 33.27.

#### Republic County

1-5-7bb. U. S. Geol. Survey. Driven and drilled observation water-table well in fine sand, diameter  $1\frac{1}{4}$  inches, depth 13 feet. Highest water level 3.20 below lsd, July 24, 1951; lowest 8.83 below lsd, Nov. 2, 1948. Records available: 1947-51. May 23, 4.51; June 26, 3.46; July 24, 3.20; Aug. 22, 5.37; Oct. 1, 5.15; Oct. 24, 5.42.

1-5-7cb. U. S. Geol. Survey. Drilled observation water-table well in loess and silt, diameter  $1\frac{1}{4}$  inches, depth 25 feet. Highest water level 15.38 below lsd, July 24, 1951; lowest 22.04 below lsd, Feb. 7, 1949. Records available: 1947-51.

Date	Water level						
Jan. 15	18.81	Mar. 21	18.85	May 24	17.76	July 24	15.38
Feb. 19	19.24	Apr. 18	18.70	June 26	16.68	Aug. 22	16.22

40. City of Republic. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 31, T. 1 S., R. 4 W. Drilled municipal well, diameter 18 inches, depth 63 feet. Records available: 1942-48. Measurement discontinued.

158a. A. J. Dickerman. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 1, T. 3 S., R. 4 W. Drilled unused well, diameter 8 inches, depth 43 feet. Records available: 1949-50. Measurement discontinued.

188. City of Courtland. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 16, T. 3 S., R. 5 W. Dug unused well, diameter 10 feet, depth 53 feet. Records available: 1942-49. Measurement discontinued.

202. Charles E. Erickson. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 36, T. 4 S., R. 1 W. Dug domestic and stock water-table well in Dakota formation, diameter 42 inches, depth 38 feet, cribbed with rock. Highest water level 33.50 below lsd, Aug. 3, 1943, Apr. 27, 1946; lowest 35.74 below lsd, Aug. 29, 1943. Records available: 1942-51. Jan. 28, 34.00. Measurement discontinued.

209. Glenn B. Snapp. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 1, T. 4 S., R. 3 W. Dug stock well, diameter 42 inches, depth 43 feet. Records available: 1942-47. Measurement discontinued.

230. Lloyd Blosser. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 4 S., R. 4 W. Unused irrigation well, diameter 24 inches, depth 48 feet. Records available: 1942-45. Measurement discontinued.

#### Rice County

18-6-13bc. F. Kasparek. Drilled unused water-table well in Kiowa shale, diameter 6 inches, depth 107 feet. Highest water level 10.17 below lsd, Oct. 23, 1951; lowest 13.14 below lsd, Jan. 6, 1948. Records available: 1946-51. Jan. 13, 12.60; Mar. 22, 12.30; July 31, 10.26; Aug. 24, 10.48; Oct. 23, 10.17; Dec. 28, 10.20.

18-7-10ad. G. J. O'Neill. Dug unused water-table well in Dakota formation, diameter 4 feet, depth 47 feet, cribbed with rock. Highest water level 29.97 below lsd, July 31, 1951; lowest 43.54 below lsd, Sept. 16, 1946. Records available: 1946-51. Jan. 13, 30.70; Mar. 22, 41.57; July 31, 29.97; Aug. 24, 33.8; Oct. 23, 38.16; Dec. 26, 40.40.

18-8-10dc. C. Dobrinski. Dug unused water-table well in terrace deposits of Quaternary age, diameter 36 inches, depth 59 feet. Highest water level 39.08 below lsd, Aug. 24, 1951; lowest 42.18 below lsd, Dec. 5, 1946. Records available: 1946-51. Jan. 13, 40.80; July 31, 39.15; Aug. 24, 39.08; Oct. 23, 39.24; Dec. 28, 39.23.

19-6-13dd. W. M. Myers. Drilled unused water-table well in shale of Permian age, diameter 8 inches, depth 77 feet. Highest water level 39.80 below lsd, Dec. 28, 1951; lowest 41.12 below lsd, Jan. 6, 1948. Records available: 1946-51. Jan. 13, 40.21; Mar. 22, 40.58; July 31, 40.29; Aug. 24, 40.12; Oct. 23, 40.29; Dec. 28, 39.80.

19-7-24ab. J. P. Pulliam. Dug unused water-table well from sandstone in Kiowa shale, diameter 36 inches, depth 41 feet, cribbed with brick. Highest water level 24.75 below lsd, July 31, 1951; lowest 36.51 below lsd, Apr. 15, 1950. Records available: 1946-51. Mar. 22, 33.44; July 31, 24.75; Aug. 24, 26.96; Oct. 23, 29.28; Dec. 28, 31.39.

19-10-22bc. J. R. Bowman. Drilled unused water-table well in terrace gravel, diameter 8 inches, depth 68 feet. Highest water level 1.02 below lsd, Sept. 23, 1950; lowest 8.00 below lsd, Oct. 4, 1946. Records available: 1946-51. Jan. 13, 2.05; Mar. 22, 1.03; July 31, 1.38; Aug. 24, 1.28; Oct. 23, 2.89; Dec. 28, 2.95.

20-6-23cd. School District. Drilled unused water-table well in Ninnescaw shale, depth 75 feet. Highest water level 4.57 below lsd, Apr. 7, 1948; lowest 21.90 below lsd, Apr. 15, 1950. Records available: 1946-51. Jan. 13, 5.55; Mar. 22, 12.16; July 31, 5.2; Aug. 24, 8.6; Oct. 23, 13.29; Dec. 28, 13.60.

20-10-28ba. H. Thompson. Drilled unused water-table well in terrace gravel, diameter 8 inches, depth 30 feet. Highest water level 8.85 below lsd, July 30, 1951; lowest 13.39 below lsd, Oct. 4, 1946. Records available: 1946-51. Jan. 13, 9.21; Mar. 22, 11.59; July 30, 8.85; Aug. 24, 9.44; Oct. 23, 10.88; Dec. 28, 11.39.

21-8-20cc. R. J. Dill. Drilled unused water-table well in alluvium, diameter 14 inches, depth 39 feet. Highest water level 4.98 below lsd, Aug. 5, 1948; lowest 8.76 below lsd, Oct. 3, 1947. Records available: 1946-51. Jan. 13, 6.81; Mar. 22, 6.65; July 31, 5.19; Aug. 24, 5.26; Oct. 23, 6.03; Dec. 28, 6.40.

#### Russell County

45. Jacob Flegler. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 15 S., R. 14 W. Dug stock water-table well in alluvium, diameter 28 to 32 inches, depth 27 feet, cribbed with rock. Highest water level 18.39 below lsd, July 12, 1945; lowest 24.28 below lsd, Aug. 20, 1941. Records available: 1941-51. Jan. 23, 19.74; Apr. 17, 20.90; July 11, 18.55; Oct. 23, 19.04.

80. Joseph Furthmyer, Jr. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 14 S., R. 15 W. Dug unused water-table well in deposits of Tertiary age, diameter 5 feet, depth 15 feet, cribbed with rock. Highest water level 3.40 below lsd, Apr. 14, 1942; lowest 7.76 below lsd, June 29, 1943. Records available: 1941-51. Jan. 23, 5.50; Apr. 17, 5.00; July 23, 4.69; Oct. 23, 4.85.

81. Joseph Furthmyer, Jr. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 14 S., R. 15 W. Drilled stock water-table well in Dakota formation, diameter 6 inches, depth 224 feet. Highest water level 101.85 below lsd, Aug. 29, 1941; lowest 134.71 below lsd, July 10, 1947. Records available: 1941-51. Jan. 23, 118.49; Apr. 17, 118.30; July 23, 118.27; Oct. 23, 118.13.

117. Marie Dutt and others. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 13 S., R. 14 W. Dug unused water-table well in alluvium, diameter 26 to 32 inches, depth 14 feet, cribbed with rock. Highest water level 4.70 below lsd, Apr. 13, 1942; lowest 10.61 below lsd, Dec. 20, 1943. Records available: 1941-51. Jan. 23, 6.18; Apr. 17, 6.90; July 23, 5.15; Oct. 23, 5.74.

146. D. P. Steinle. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 24, T. 14 S., R. 12 W. Dug unused water-table well in terrace deposits of Pleistocene age, diameter 28 inches, depth 17 feet, cribbed with rock. Highest water level 13.15 below lsd, Oct. 23, 1951; lowest 16.20 below lsd, Sept. 1, 1942. Records available: 1941-51. Jan. 23, 14.79; Apr. 17, 14.70; July 23, 13.68; Oct. 23, 13.15.

148. John Penix. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 13., T. 14 S., R. 13 W. Dug domestic and stock water-table well in terrace deposits of Pleistocene age, diameter 28 to 36 inches, depth 12 feet, cribbed with rock. Highest water level 3.17 below lsd, Jan. 23, 1951; lowest 7.92 below lsd, Oct. 2, 1941. Records available: 1941-51. Jan. 23, 3.17; Apr. 17, 5.64.

149. George Boxberger, Jr. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 22, T. 14 S., R. 14 W. Dug unused water-table well in Greenhorn limestone, diameter 32 to 36 inches, depth 23 feet, cribbed with rock. Highest water level 17.45 below lsd, Oct. 23, 1951; lowest 21.54 below lsd, June 29, 1943. Records available: 1941-51. Jan. 23, 19.46; Apr. 17, 19.51; July 11, 18.55; Oct. 23, 17.45.

152. D. D. Beisel. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 10, T. 14 S., R. 12 W. Dug unused water-table well in Greenhorn limestone, diameter 28 to 32 inches, depth 31 feet cribbed with rock. Highest water level 6.13 below lsd, July 23, 1951; lowest 26.45 below lsd, Sept. 22, 1941. Records available: 1941-51. Jan. 23, 10.90; Apr. 17, 9.45; July 23, 6.13; Oct. 23, 8.70.

#### Saline County

15-2-17cd. U. S. Geol. Survey. Driven and drilled observation water-table well in alluvium and terrace deposits, diameter 1 $\frac{1}{4}$  inches, depth 31 feet. Highest water level 9.58 below lsd, Oct. 1, 1951; lowest 25.44 below lsd, Jan. 6, 1948. Records available: 1946-51.

15-2-17cd--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	22.97	May 18	23.34	July 24	10.22	Oct. 1	9.58
Mar. 15	23.63	July 2	20.25	Aug. 17	10.50	Nov. 9	12.45

15-2-18cd. U. S. Geol. Survey. Driven and drilled observation water-table well in terrace sediments, diameter  $1\frac{1}{4}$  inches, depth 45 feet. Highest water level 11.50 below lsd, Sept. 18, 1951; lowest 25.50 below lsd, Jan. 6, 1948. Records available: 1946-51.

Jan. 19	23.55	June 22	21.15	Sept. 18	11.50	Nov. 23	15.52
Feb. 24	24.10	July 19	13.96	Oct. 1	11.72	29	15.66
Mar. 16	24.25	24	14.73	16	12.13	Dec. 7	15.27
Apr. 20	24.45	Aug. 17	14.29	Nov. 18	14.99	14	17.10
May 16	23.96						

15-2-30dc. U. S. Geol. Survey. Driven and drilled observation water-table well in terrace sediments, diameter  $1\frac{1}{4}$  inches, depth 37 feet. Highest water level 6.56 below lsd, July 24, 1951; lowest 22.42 below lsd, Sept. 5, 1946. Records available: 1946-51. Jan. 24, 21.15; Mar. 15, 21.58; May 18, 21.24; July 2, 19.27; July 24, 6.56; Aug. 17, 9.75; Nov. 9, 14.93.

15-3-24dd. U. S. Geol. Survey. Driven and drilled observation water-table well in terrace sediments, diameter  $1\frac{1}{4}$  inches, depth 35 feet. Highest water level 4.30 below lsd, July 24, 1951; lowest 20.64 below lsd, Jan. 6, 1948. Records available: 1946-51. Jan. 24, 20.13; Mar. 15, 20.30; May 18, 20.45; July 24, 4.30; Aug. 17, 9.47; Oct. 1, 6.83; Nov. 9, 8.74.

15-3-36ab. U. S. Geol. Survey. Driven and drilled observation water-table well in terrace sediments, diameter  $1\frac{1}{4}$  inches, depth 45 feet. Highest water level 17.57 below lsd, Nov. 9, 1951; lowest 27.35 below lsd, Jan. 6, 1948. Records available: 1946-51. Jan. 24, 26.47; Mar. 15, 26.74; May 18, 25.03; July 2, 25.71; July 24, 20.22; Aug. 17, 19.65; Nov. 9, 17.57.

16-2-7bb. U. S. Geol. Survey. Driven and drilled observation water-table well in terrace sediments, diameter  $1\frac{1}{4}$  inches, depth 30 feet. Highest water level 10.29 below lsd, July 24, 1951; lowest 22.08 below lsd, Aug. 1, 1946. Records available: 1946-51.

Jan. 24	19.35	May 18	19.89	July 24	10.29	Oct. 1	10.54
Mar. 15	19.82	July 2	18.73	Aug. 17	12.11	Nov. 9	11.70

16-2-18cc. U. S. Geol. Survey. Driven and drilled observation water-table well in terrace sediments, diameter  $1\frac{1}{4}$  inches, depth 36 feet. Highest water level 11.76 below lsd, Aug. 17, 1951; lowest 26.52 below lsd, Dec. 1, 1947. Records available: 1946-51.

Jan. 24	24.69	May 18	22.50	July 24	13.03	Oct. 1	12.44
Mar. 15	25.13	July 2	18.21	Aug. 17	11.76	Nov. 9	18.97

16-2-19ab. U. S. Geol. Survey. Driven and drilled observation water-table well in terrace sediments, diameter  $1\frac{1}{4}$  inches, depth 36 feet. Highest water level 10.03 below lsd, Aug. 17, 1951; lowest 24.67 below lsd, Dec. 1, 1947. Records available: 1946-51. Jan. 24, 22.75; Mar. 15, 23.16; May 18, 20.21; July 2, 18.11; Aug. 17, 10.03; Oct. 1, 11.46; Nov. 9, 16.69.

16-3-13cd. U. S. Geol. Survey. Driven and drilled observation water-table well in terrace sediments, diameter  $1\frac{1}{4}$  inches, depth 47 feet. Highest water level 11.64 below lsd, Oct. 1, 1951; lowest 24.38 below lsd, Jan. 6, 1948. Records available: 1946-51.

Jan. 24	21.38	May 18	22.19	July 24	15.06	Oct. 1	11.64
Mar. 15	22.10	July 2	20.80	Aug. 17	13.76	Nov. 9	12.83

16-3-26dc. U. S. Geol. Survey. Driven and drilled observation water-table well in terrace sediments, diameter  $1\frac{1}{4}$  inches, depth 26 feet. Highest water level 4.96 below lsd, July 24, 1951; lowest 21.60 below lsd, Jan. 6, 1948. Records available: 1946-51.

Jan. 24	18.76	May 18	19.64	July 24	4.96	Oct. 1	9.02
Mar. 15	19.50	July 2	16.23	Aug. 17	8.29	Nov. 9	11.37

16-3-34dd. U. S. Geol. Survey. Driven and drilled observation water-table well in terrace sediments, diameter  $1\frac{1}{4}$  inches, depth 44 feet. Highest water level 5.80 below lsd, July 24, 1951; lowest 23.15 below lsd, Jan. 6, 1948. Records available: 1946-51.

Jan. 24	20.10	May 16	20.77	July 24	5.80	Oct. 1	9.30
Mar. 15	20.90	July 2	18.39	Aug. 17	9.45	Nov. 9	11.43

Scott County

1. Mrs. Rosene Smith. NW $\frac{1}{4}$  sec. 9, T. 20 S., R. 33 W. Drilled observation water-table well in Ogallala formation, diameter 24 inches, depth 100 feet. Highest water level 55.89 below lsd, May 14, 16, 1934; lowest 68.46 below lsd, Nov. 4, 1947. Records available: 1931-51. Jan. 25, 67.22; Feb. 8, 65.92; Mar. 29, 68.23; Apr. 23, 65.94; May 29, 65.58; June 18, 65.77; July 18, 64.92.

1A. Kansas State Board of Agriculture. Division of Water Resources. NW $\frac{1}{4}$  SW $\frac{1}{4}$  sec. 3, T. 20 S., R. 33 W. Drilled observation water-table well in Ogallala formation, diameter 7 inches, depth 69 feet. Highest water level 53.42 below lsd, Aug. 16, 18, 1940; lowest 58.99 below lsd, Aug. 6, 7, 1950. Records available: 1940-51.

Daily mean water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	58.19	.....	57.97	57.80	57.63	57.42	.....	54.65	54.95	55.13	55.40	55.30
2	58.19	58.07	57.96	57.80	57.63	57.41	.....	54.66	54.97	55.12	55.38	55.28
3	58.19	58.07	57.96	57.78	57.62	57.40	.....	54.70	54.98	55.12	55.37	55.27
4	58.18	58.06	57.96	57.77	57.62	57.39	.....	54.70	54.99	55.16	55.38	55.26
5	58.18	58.04	57.95	57.77	57.62	57.35	.....	54.73	55.01	55.19	55.40	55.24
6	58.17	58.05	57.95	57.76	57.63	57.32	.....	54.77	55.03	55.20	55.40	55.25
7	58.16	58.06	57.95	57.75	57.62	57.31	.....	54.77	55.06	55.19	55.38	55.32
8	58.16	58.05	57.95	57.75	57.62	57.29	.....	54.79	55.04	55.19	55.37	55.33
9	58.16	58.05	57.94	57.72	57.62	57.25	.....	54.82	55.07	55.19	55.38	55.33
10	58.16	58.05	57.94	57.72	57.62	57.22	.....	54.83	55.05	55.17	55.37	55.28
11	58.15	58.04	57.95	57.71	57.61	57.18	.....	54.84	55.06	55.18	55.34	55.26
12	58.16	58.03	57.94	57.70	57.60	57.12	.....	54.83	55.12	55.14	55.33	55.24
13	58.16	58.03	57.93	57.68	57.59	57.09	.....	54.84	55.12	55.16	55.35	55.22
14	58.17	58.03	57.92	57.68	57.58	57.08	.....	54.84	55.14	55.18	55.35	55.28
15	58.17	58.02	57.91	57.69	57.58	57.07	.....	54.87	55.16	55.14	55.38	.....
16	58.16	58.01	57.90	57.69	57.57	57.06	.....	54.86	55.14	55.18	55.41	.....
17	58.16	58.01	57.89	57.68	57.56	57.05	.....	54.86	55.14	55.18	55.38	.....
18	58.16	58.02	57.88	57.68	57.56	57.04	.....	54.55	54.87	55.12	55.20	55.36
19	58.16	58.01	57.87	57.68	57.56	57.03	.....	54.55	54.87	55.12	55.18	55.35
20	58.16	58.01	57.87	57.68	57.55	57.02	.....	54.54	54.88	55.14	55.14	55.34
21	58.14	58.00	57.86	57.68	57.55	57.01	.....	54.55	54.91	55.16	55.19	55.35
22	58.14	58.00	57.84	57.68	57.55	57.00	.....	54.58	54.91	55.13	55.28	55.36
23	58.14	58.01	57.84	57.68	57.54	57.00	.....	54.58	54.91	55.15	55.27	55.36
24	58.14	58.00	57.83	57.68	57.53	57.00	.....	54.58	54.91	55.16	55.27	55.34
25	58.13	58.00	57.82	57.68	57.53	57.00	.....	54.58	54.91	55.12	55.28	55.35
26	58.13	57.99	57.81	57.67	57.52	57.00	.....	54.58	54.91	55.17	55.34	55.34
27	58.12	57.98	57.81	57.66	57.50	57.00	.....	54.61	54.91	55.21	55.34	55.33
28	58.12	57.97	57.81	57.65	57.47	57.00	.....	54.62	54.91	55.18	55.33	55.32
29	58.11	.....	57.80	57.64	57.47	57.00	.....	54.63	54.91	55.14	55.32	55.32
30	.....	.....	57.79	57.64	57.44	57.00	.....	54.64	54.92	55.13	55.38	55.30
31	.....	.....	57.79	.....	57.43	.....	.....	54.64	54.94	55.38	.....	.....

2. E. E. Coffin. NE $\frac{1}{4}$  SE $\frac{1}{4}$  sec. 25, T. 18 S., R. 33 W. Drilled unused water-table well in deposits of Pleistocene age, diameter 18 inches, depth 44 feet. Highest water level 21.95 below lsd, Dec. 10, 1951; lowest 40.81 below lsd, Dec. 11, 1947. Records available: 1934-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	34.01	Apr. 23	32.57	July 18	29.12	Oct. 17	23.11
Feb. 8	33.48	May 29	32.20	Aug. 14	26.07	Nov. 6	22.77
Mar. 29	32.92	June 18	31.75	Sept. 27	23.76	Dec. 10	21.95

2A. State of Kansas. SE $\frac{1}{4}$  sec. 26, T. 18 S., R. 33 W. Drilled observation water-table well, diameter 8 inches, depth 60 feet. Highest water level 20.60 below lsd, Dec. 28, 1951; lowest 38.33 below lsd, Sept. 16, 1946. Records available: 1944-51.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	31.80	31.62	31.52	31.41	.....	30.98	.....	.....	22.56	21.61	21.34	20.85
2	31.77	31.58	31.46	31.43	.....	31.00	27.66	.....	22.54	21.56	21.26	20.81
3	31.74	31.57	31.55	31.38	.....	30.97	27.44	.....	22.50	21.56	21.18	20.93
4	31.81	31.58	31.52	31.35	.....	30.92	27.23	.....	22.46	21.67	21.19	20.80
5	31.79	31.53	31.48	31.33	.....	30.87	26.96	.....	22.43	21.71	21.27	20.75
6	31.84	31.60	31.56	31.38	.....	30.81	26.80	.....	22.41	21.72	21.28	20.87
7	31.81	31.60	31.53	31.39	.....	30.78	26.47	.....	22.38	21.64	.....	21.10
8	31.75	31.54	31.60	31.37	.....	30.77	26.28	.....	22.29	21.60	.....	21.10
9	31.70	31.56	31.56	31.35	.....	30.76	26.11	.....	22.26	21.54	.....	21.04
10	31.77	31.53	31.52	31.37	.....	30.70	25.95	.....	22.20	21.50	.....	20.92

2A--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	31.69	31.49	31.59	31.38	.....	30.65	25.83	.....	22.11	21.45	.....	20.85
12	31.71	31.54	31.57	31.37	.....	30.60	25.71	.....	22.20	21.41	.....	20.80
13	31.75	31.63	31.50	31.33	.....	30.51	25.58	.....	22.18	21.48	.....	20.75
14	31.72	31.59	31.49	31.33	.....	30.47	25.42	23.27	22.10	21.52	21.10	20.94
15	31.72	31.55	31.46	31.39	.....	30.38	25.28	23.28	22.13	21.38	21.20	20.97
16	31.65	31.50	31.43	31.37	.....	30.30	25.18	23.17	22.03	21.46	21.33	20.77
17	31.65	31.50	31.50	31.28	.....	30.20	25.06	23.12	21.97	21.49	21.29	20.74
18	31.66	31.50	31.54	31.30	.....	30.13	24.98	23.07	21.90	21.52	21.09	20.76
19	31.64	31.52	31.50	31.33	.....	30.02	24.88	23.01	21.85	21.36	21.04	20.62
20	31.74	31.56	31.47	31.30	.....	29.94	24.75	22.97	21.85	21.22	20.94	20.80
21	31.74	31.52	31.45	31.33	.....	29.84	24.66	22.97	21.95	21.35	20.97	20.84
22	31.62	31.52	31.39	31.38	.....	29.77	24.62	22.91	21.85	21.42	21.06	20.74
23	31.69	31.53	31.49	31.31	.....	29.65	24.60	22.84	21.78	21.41	21.05	20.91
24	31.68	31.50	31.48	31.31	.....	29.53	24.58	22.78	21.82	21.29	21.01	20.77
25	31.63	31.49	31.45	31.35	.....	29.34	24.57	22.74	21.73	21.28	21.00	20.87
26	31.58	31.52	31.40	31.30	.....	29.14	24.57	22.72	21.73	21.39	21.06	20.99
27	31.65	31.49	31.36	31.28	.....	28.94	.....	22.67	21.88	21.33	20.98	20.75
28	31.68	31.51	31.43	31.33	.....	28.81	.....	22.64	21.79	21.24	20.95	20.60
29	31.69	31.44	31.34	31.09	.....	28.68	.....	22.62	21.64	21.19	20.94	20.63
30	31.65	31.40	31.04	31.04	.....	28.55	.....	22.61	21.65	21.32	20.89	20.61
31	31.61	31.41	31.00	31.00	.....	28.42	.....	22.57	21.32	21.00	20.80	

3. Claude Hughes. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 18 S., R. 33 W. Drilled irrigation water-table well in sand and gravel, diameter 18 inches, depth 138 feet. Highest water level 67.94 below lsd, May 30, 1934; lowest 91.99 below lsd, Oct. 13, 1948. Records available: 1934, 1939-51. Jan. 8, 81.96; Feb. 8, 80.67; Mar. 29, 79.90.

19. Mr. Fouquet. Formerly J. Dyer. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 12, T. 18 S., R. 33 W. Drilled irrigation water-table well in Ogallala formation, diameter 12 inches, depth 71 feet. Highest water level 44.85 below lsd, Dec. 10, 1951; lowest 58.09 below lsd, Feb. 17, 1949. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	50.86	Apr. 23	49.16	July 18	47.72	Oct. 17	46.50
Feb. 8	49.76	May 29	49.53	Aug. 14	47.45	Dec. 10	44.85
Mar. 29	49.24	June 18	49.48	Sept. 27	47.30		

32. E. J. Roark. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 25, T. 19 S., R. 33 W. Drilled observation water-table well in Ogallala formation, diameter 1 $\frac{1}{4}$  inches, depth 45 feet. Highest water level 31.06 below lsd, June 18, 1951; lowest 44.88 below lsd, Dec. 16, 1949. Records available: 1939-51.

Jan. 8	41.76	Apr. 23	41.31	July 18	40.20	Oct. 17	38.46
Feb. 8	41.73	May 29	41.25	Aug. 14	39.42	Dec. 10	38.00
Mar. 29	41.43	June 18	31.06	Sept. 27	38.70		

48. P. Roark. NE $\frac{1}{4}$  sec. 25, T. 20 S., R. 33 W. Drilled unused water-table well in Ogallala formation, diameter 5 inches, depth 35 feet. Highest water level 25.82 below lsd, Sept. 27, 1951; lowest 31.52 below lsd, Apr. 24, 1944. Records available: 1939-51.

Jan. 8	28.90	Apr. 23	30.13	July 18	27.00	Oct. 17	27.09
Feb. 8	29.08	May 29	29.87	Aug. 14	27.16	Nov. 6	27.14
Mar. 29	30.12	June 18	28.51	Sept. 27	25.82	Dec. 10	27.22

50. F. M. Houstin. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 28, T. 19 S., R. 32 W. Drilled unused water-table well in Ogallala formation, diameter 5 inches, depth 129 feet. Highest water level 89.09 below lsd, Oct. 17, 1951; lowest 97.95 below lsd, Aug. 6, 1943. Records available: 1939-51. July 18, 89.93; Oct. 17, 89.09.

#### Sedgwick County

11. J. H. Heim. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 22, T. 26 S., R. 3 W. Dug unused well in Ogallala formation, diameter 24 inches, depth 64 feet. Records available: 1937-50. Measurement discontinued.

12. Dr. A. D. Updegraph. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 26, T. 25 S., R. 1 W. Drilled observation water-table well in gravel and alluvium, diameter 24 inches, depth 54 feet. Highest water level 10.05 below lsd, July 25, 1951; lowest 18.99 below lsd, Apr. 1, 2, 8, 9, 11, 12, 1938. Records available: 1937-51.

## 12--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	16.10	Apr. 3	16.70	July 9	11.20	Oct. 2	13.67
25	16.27	25	16.68	25	10.05	25	13.10
Feb. 5	16.33	May 3	16.36	Aug. 1	11.10	Nov. 7	13.41
24	16.51	24	14.16	25	12.57	24	13.84
Mar. 1	16.53	June 1	13.53	Sept. 7	13.00	30	13.95
24	16.66	25	13.06	25	12.48	Dec. 22	13.41

26. Wichita Water Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 18, T. 27 S., R. 1 E. Drilled observation water-table well in alluvium, diameter 26 inches, depth 47 feet. Highest water level 4.24 below lsd, July 1, 1951; lowest 23.69 below lsd, Jan. 29, 1939. Records available: 1937-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	11.85	11.09	11.35	10.88	7.17	4.24	8.78	10.47	10.54	11.08	11.20
2	.....	11.37	11.07	11.35	10.54	7.65	4.24	8.97	10.59	10.58	11.08	11.19
3	.....	11.37	11.08	11.34	10.02	8.04	4.48	9.17	10.68	10.64	11.10	11.22
4	.....	11.36	11.08	11.33	9.98	8.35	4.49	9.37	10.75	10.72	11.10	11.22
5	11.46	11.34	11.09	11.33	10.04	8.46	4.58	9.54	10.76	10.77	11.12	11.21
6	11.46	11.43	11.13	11.31	10.27	8.44	4.67	9.79	10.55	10.77	11.11	11.25
7	11.46	11.49	11.14	11.26	10.38	8.12	4.83	9.90	9.86	10.67	11.11	11.26
8	11.41	11.52	11.17	11.22	10.49	7.74	5.13	10.07	9.95	10.46	11.09	11.26
9	11.44	11.55	11.19	11.23	10.58	7.28	5.67	10.08	10.02	10.56	11.07	11.25
10	11.49	11.55	11.19	11.27	10.62	7.10	6.39	9.99	10.07	10.64	11.07	11.26
11	11.49	11.50	.....	11.27	10.65	6.92	6.86	9.56	10.10	10.70	11.06	11.26
12	11.46	11.37	.....	11.26	10.70	6.85	7.06	9.70	10.10	10.76	11.01	11.26
13	11.47	11.31	.....	11.26	10.70	6.90	7.05	9.77	9.97	10.82	11.06	11.26
14	11.46	11.48	.....	11.30	10.62	6.98	6.54	9.75	9.56	10.85	11.10	11.30
15	11.47	11.60	.....	11.32	10.52	6.98	6.01	9.55	9.43	10.87	11.18	11.30
16	11.47	11.73	.....	11.32	10.45	6.86	.....	9.58	9.38	10.91	11.22	11.38
17	11.45	11.73	11.35	11.32	10.34	6.80	.....	9.69	9.55	10.95	11.23	11.47
18	11.46	11.71	11.35	11.35	9.15	6.79	.....	9.82	9.68	10.99	11.22	11.48
19	11.45	11.55	11.34	11.38	8.16	7.03	.....	9.95	9.79	11.00	11.18	11.46
20	11.49	11.37	11.35	11.40	7.75	7.27	.....	10.07	9.89	11.03	11.17	11.42
21	11.49	11.28	11.37	11.43	7.38	7.54	6.75	10.18	10.01	11.07	11.14	11.52
22	11.45	11.20	11.36	11.43	7.18	7.76	6.79	10.24	10.13	11.08	11.15	11.59
23	11.48	11.15	11.40	11.51	6.80	7.78	7.13	10.29	10.21	11.09	11.14	11.60
24	11.49	11.16	11.41	11.46	6.26	7.59	7.26	10.35	10.22	11.10	11.14	11.59
25	11.48	11.15	11.42	11.26	6.02	7.12	7.46	10.41	10.08	11.13	11.17	11.60
26	.....	11.12	11.43	11.16	5.90	6.73	7.69	10.45	10.10	11.15	11.18	11.60
27	11.44	11.10	.....	11.16	5.79	6.52	7.89	10.49	10.24	11.15	11.18	11.59
28	11.45	11.08	11.43	11.19	5.66	6.32	8.07	10.54	10.33	11.12	11.17	11.57
29	11.34	.....	11.41	.....	5.40	6.22	8.25	10.54	10.43	11.09	11.18	11.60
30	11.29	.....	11.35	.....	5.85	.....	8.43	10.39	10.49	11.08	11.19	11.60
31	11.32	.....	11.35	.....	6.60	.....	8.60	10.28	.....	11.08	.....	11.58

307. J. R. Clark. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 1, T. 25 S., R. 2 W. Drilled observation water-table well in gravel and alluvium, diameter 6 inches, depth 92 feet. Highest water level 9.08 below lsd, May 12, 13, 20, 1945; lowest 20.63 below lsd, Jan. 2 and 3, 1951. Records available: 1937-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	20.62	20.15	20.07	20.38	19.88	18.70	18.24	17.93	19.03	17.35	.....	.....
2	20.63	20.21	19.97	20.38	19.80	17.50	17.73	17.93	19.03	17.09	18.69	.....
3	20.63	20.22	19.92	20.37	19.92	18.24	17.50	18.03	19.02	16.92	.....	.....
4	20.57	20.22	19.89	20.35	20.05	.....	17.49	18.03	18.96	.....	.....	.....
5	20.48	20.28	19.84	20.35	20.15	.....	17.34	17.94	18.85	.....	.....	.....
6	20.40	20.40	19.86	20.34	20.20	.....	17.51	17.87	18.67	.....	.....	.....
7	20.32	20.46	19.88	20.34	20.20	.....	17.67	17.87	18.62	.....	.....	.....
8	20.23	20.49	19.91	20.32	20.26	18.62	17.77	17.87	18.48	.....	.....	.....
9	20.15	20.53	19.91	20.32	20.27	18.62	17.86	17.71	18.35	.....	.....	.....
10	20.08	20.53	19.90	20.31	20.27	18.44	17.91	17.79	18.35	.....	.....	.....
11	20.05	20.52	19.90	20.29	20.27	18.20	17.91	18.02	18.43	.....	.....	.....
12	19.95	20.52	19.90	20.24	20.25	18.08	17.66	18.09	18.43	.....	.....	.....
13	19.94	20.51	19.89	20.18	20.25	17.95	17.76	18.16	18.27	.....	.....	.....
14	19.90	20.51	19.90	20.09	20.25	17.89	17.74	18.27	18.40	.....	.....	.....
15	19.86	20.46	19.92	20.06	20.25	17.70	17.40	18.34	18.45	.....	.....	.....

307--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	19.97	20.44	19.90	20.01	20.20	17.73	17.22	18.34	18.48	.....	.....	.....
17	20.09	20.38	19.88	19.99	19.97	17.78	17.22	18.46	18.59	.....	.....	.....
18	20.20	20.37	19.83	19.94	19.86	17.85	17.57	18.49	18.60	.....	.....	.....
19	20.31	20.36	19.78	19.90	19.62	17.87	17.63	18.49	18.70	.....	.....	.....
20	20.35	20.35	19.76	19.89	.....	17.90	17.49	18.40	18.77	.....	.....	.....
21	20.34	20.34	19.76	19.89	.....	17.90	17.32	18.42	19.00	.....	.....	.....
22	20.31	20.33	19.75	19.89	.....	18.09	17.29	18.54	18.99	.....	.....	.....
23	20.26	20.29	19.76	19.88	.....	18.09	17.28	18.64	18.89	.....	.....	.....
24	20.23	20.29	19.87	19.87	.....	17.82	17.07	18.78	18.70	.....	.....	.....
25	20.19	20.23	20.05	19.93	18.54	17.78	16.94	18.85	18.56	.....	.....	.....
26	20.14	20.16	20.16	19.99	18.47	18.02	16.90	18.90	18.34	.....	.....	.....
27	20.03	20.16	20.28	19.99	18.31	18.22	16.93	18.88	18.33	.....	.....	.....
28	20.02	20.08	20.33	19.99	18.15	18.33	17.06	18.82	18.33	.....	.....	19.19
29	20.00	20.08	20.36	19.97	18.10	18.39	17.07	18.88	17.92	.....	.....	.....
30	20.02	20.08	20.38	19.95	18.63	18.39	17.58	18.89	17.60	.....	18.61	.....
31	20.05	20.38	.....	18.70	.....	17.81	18.95	.....	.....	.....	.....	.....

502. Kansas Gas & Electric Co. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 29, T. 26 S., R. 1 E. Drilled industrial water-table well in sand, diameter 24 inches, depth 46 feet. Highest water level 12.49 below lsd, Mar. 20, 1944; lowest 30.20 below lsd, June 13, 1951. Records available: 1943-51.

Date	Water level						
Jan. 17	28.00	Apr. 4	29.30	July 20	18.10	Sept. 6	22.90
Feb. 9	27.90	May 9	25.40	Aug. 8	23.20	Nov. 12	24.60
Mar. 7	28.00	June 13	30.20				

800. City of Wichita. SW $\frac{1}{4}$  sec. 33, T. 26 S., R. 1 E. Driven observation well, diameter 1 $\frac{1}{4}$  inches, depth 37 feet. Records available: 1938-49. Measurement discontinued.

802. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 1, T. 27 S., R. 1 W. Driven observation water-table well in medium coarse sand, diameter 1 $\frac{1}{4}$  inches, depth 26 feet. Highest water level 1.96 below lsd, May 11, 1942; lowest 8.46 below lsd, Dec. 5, 1947. Records available: 1939-51. Measurement discontinued.

Jan. 3	7.69	Mar. 1	7.12	May 3	5.77	July 11	3.92
Feb. 5	7.72	Apr. 3	7.66	June 1	4.20	Aug. 1	4.84

804. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 16, T. 26 S., R. 1 W. Driven observation water-table well in coarse sand, diameter 1 $\frac{1}{4}$  inches, depth 26 feet. Highest water level 0.10 below lsd, Aug. 4, 1950; lowest 5.20 below lsd, Sept. 26, 1946. Records available: 1938-51.

Jan. 3	2.93	Apr. 3	2.70	July 11	0.20	Oct. 3	1.10
Feb. 5	3.35	May 3	1.79	Aug. 1	1.35	Nov. 30	2.33
Mar. 1	3.02	June 1	1.30	Sept. 8	.76		

805. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 19, T. 26 S., R. 1 W. Driven observation water-table well in coarse sand, diameter 1 $\frac{1}{4}$  inches, depth 41 feet. Highest water level 1.57 below lsd, May 2, 1945; lowest 6.27 below lsd, Sept. 26, 1946. Records available: 1938-51.

Jan. 3	3.85	Apr. 4	3.80	July 11	1.90	Oct. 3	1.80
Feb. 5	3.99	May 3	2.65	Aug. 1	2.46	Nov. 7	2.28
Mar. 1	3.44	June 1	2.42	Sept. 8	1.59	30	2.57

807. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 10, T. 26 S., R. 2 W. Driven observation water-table well in coarse sand, diameter 1 $\frac{1}{4}$  inches, depth 37 feet. Highest water level 18.09 below lsd, Oct. 3, 1951; lowest 23.04 below lsd, Jan. 2, 1941. Records available: 1938-51.

Jan. 3	20.81	Apr. 3	21.36	July 11	18.49	Oct. 3	18.09
Feb. 5	21.20	May 3	21.24	Aug. 1	18.85	Nov. 30	19.08
Mar. 1	21.31	June 1	19.60	Sept. 8	19.01		

808. City of Wichita. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 18, T. 26 S., R. 2 W. Driven observation water-table well in medium sand, diameter 1 $\frac{1}{4}$  inches, depth 49 feet. Highest water level 18.59 below lsd, Nov. 30, 1951; lowest 23.47 below lsd, Mar. 4, 1941. Records available: 1938-51.

Jan. 3	20.80	Apr. 3	21.06	July 11	19.50	Oct. 3	18.62
Feb. 5	20.87	May 3	21.01	Aug. 1	19.50	Nov. 7	18.76
Mar. 1	20.95	June 1	20.35	Sept. 8	19.22	30	18.59

809. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 21, T. 26 S., R. 1 E. Driven observation water-table well in medium sand, diameter 1 $\frac{1}{4}$  inches, depth 32 feet. Highest water level 5.91 below lsd, July 11, 1951; lowest 14.68 below lsd, Jan. 2, 1941. Records available: 1938-51.

## 809--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	11.03	Apr. 3	11.66	July 11	5.91	Oct. 2	6.38
Feb. 5	11.30	May 3	10.10	Aug. 1	6.81	Nov. 7	8.43
Mar. 1	11.33	June 1	7.90	Sept. 7	7.95	30	8.92

810. City of Wichita. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 35, T. 25 S., R. 1 W. Driven observation water-table well in medium sand, diameter 1 $\frac{1}{4}$  inches, depth 25 feet. Highest water level 1.94 below lsd, Apr. 28, 1944; lowest 13.38 below lsd, Aug. 30, 1940. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	12.18	Apr. 3	12.33	July 10	6.53	Oct. 2	8.22
Feb. 5	12.30	May 3	10.35	Aug. 1	8.22	Nov. 7	10.43
Mar. 1	12.22	June 1	8.02	Sept. 7	9.22	30	11.97

811. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 33, T. 25 S., R. 1 W. Driven observation water-table well in coarse sand, diameter 1 $\frac{1}{4}$  inches, depth 25 feet. Highest water level 3.27 below lsd, July 10, 1951; lowest 9.10 below lsd, Oct. 14, 1946. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	7.32	Apr. 3	7.62	July 10	3.27	Oct. 2	3.50
Feb. 5	7.50	May 3	6.77	Aug. 1	4.32	Nov. 7	5.23
Mar. 1	7.40	June 1	4.63	Sept. 7	4.17	30	5.66

812. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 27, T. 25 S., R. 1 W. Driven observation water-table well in coarse sand, diameter 1 $\frac{1}{4}$  inches, depth 25 feet. Highest water level 6.30 below lsd, Aug. 31, 1949; lowest 18.91 below lsd, Feb. 10, 1947. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	7.78	Apr. 3	8.87	July 10	8.87	Oct. 2	8.85
Feb. 5	8.81	May 3	8.89	Aug. 1	8.85	Nov. 7	8.82
Mar. 1	8.84	June 1	8.89	Sept. 7	8.84	30	8.83

814. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 14, T. 25 S., R. 1 W. Driven observation water-table well in medium sand, diameter 1 $\frac{1}{4}$  inches, depth 31 feet. Highest water level 6.23 below lsd, July 10, 1951; lowest 17.11 below lsd, Dec. 3, 1940, Jan. 2, Feb. 3, Mar. 4, May 1, 1941. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	12.74	Apr. 3	13.54	July 10	6.23	Oct. 2	7.10
Feb. 5	13.06	May 3	13.30	Aug. 1	7.76	Nov. 7	9.57
Mar. 1	13.27	June 1	10.60	Sept. 1	9.10	30	10.16

815. City of Wichita. NE $\frac{1}{4}$  sec. 17, T. 25 S., R. 1 W. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 31 feet. Highest water level 7.65 below lsd, May 11, 1945; lowest 14.04 below lsd, Jan. 24, 31, 1941. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	12.36	Apr. 3	13.19	July 10	9.34	Oct. 2	8.81
Feb. 5	12.72	May 3	13.17	Aug. 1	8.89	Nov. 7	9.27
Mar. 1	12.91	June 1	11.23	Sept. 7	9.34	30	9.85

816. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 7, T. 25 S., R. 1 W. Driven observation water-table well in fine gravel, diameter 1 $\frac{1}{4}$  inches, depth 31 feet. Highest water level 5.32 below lsd, Oct. 8, 1945; lowest 18.47 below lsd, Mar. 3, 1947. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	14.00	Apr. 3	15.02	July 9	10.74	Oct. 2	10.55
Feb. 5	14.46	May 3	14.60	Aug. 1	10.28	Nov. 30	11.41
Mar. 1	14.60	June 1	10.97	Sept. 7	11.00		

825. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 3, T. 25 S., R. 1 W. Driven observation water-table well in fine sand, diameter 1 $\frac{1}{4}$  inches, depth 25 feet. Highest water level 5.49 below lsd, May 4, 1945; lowest 15.18 below lsd, Dec. 5, 1947. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	11.99	Apr. 3	10.17	July 9	6.42	Oct. 2	6.90
Feb. 5	10.07	May 3	9.64	Aug. 1	7.27	Nov. 7	7.24
Mar. 1	9.94	June 1	8.15	Sept. 7	7.40	30	7.59

826. City of Wichita. NE $\frac{1}{4}$  sec. 5, T. 25 S., R. 1 W. Records available: 1939-49. Measurement discontinued.

830. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 30, T. 25 S., R. 2 W. Driven observation water-table well in fine sand, diameter 1 $\frac{1}{4}$  inches, depth 57 feet. Highest water level 17.35 below lsd, Nov. 30, 1951; lowest 28.82 below lsd, Nov. 5, 1940. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	25.96	Apr. 3	25.76	July 11	18.30	Oct. 3	22.89
Feb. 5	26.07	May 3	25.52	Aug. 1	23.85	Nov. 7	23.25
Mar. 1	25.65	June 1	23.98	Sept. 8	23.58	30	17.35

834. City of Wichita. SW<sub>4</sub><sup>1</sup>SW<sub>4</sub><sup>1</sup> sec. 9, T. 25 S., R. 3 W. Driven observation water-table well in fine sand, diameter 1 $\frac{1}{4}$  inches, depth 18 feet. Highest water level 5.35 below lsd, Sept. 8, 1951; lowest 11.70 below lsd, Oct. 3, 1940. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	8.93	Apr. 3	8.85	July 11	5.39	Nov. 7	6.48
Feb. 5	7.00	May 3	8.08	Sept. 8	5.35	30	7.75
Mar. 1	9.73	June 1	5.88	Oct. 3	5.82		

838. City of Wichita. NE<sub>4</sub><sup>1</sup>NW<sub>4</sub><sup>1</sup> sec. 33, T. 25 S., R. 3 W. Driven observation water-table well in medium sand, diameter 1 $\frac{1}{4}$  inches, depth 49 feet. Highest water level 17.01 below lsd, Oct. 2, 1951; lowest 26.91 below lsd, Nov. 5, 1940. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	23.19	Apr. 3	23.52	Aug. 1	19.44	Nov. 7	18.97
Feb. 5	23.40	June 1	20.90	Oct. 2	17.01	30	18.28
Mar. 1	23.48	July 11	18.50				

840. City of Wichita. NE<sub>4</sub><sup>1</sup> sec. 9, T. 25 S., R. 2 W. Drilled well, diameter 1 $\frac{1}{4}$  inches, depth 233 feet. Records available: 1938-50. Measurement discontinued.

842. City of Wichita. NW<sub>4</sub><sup>1</sup>NW<sub>4</sub><sup>1</sup> sec. 16, T. 25 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 15 feet. Highest water level 1.39 below lsd, Oct. 4, 1945; lowest 7.62 below lsd, Sept. 26, 1946. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	5.70	May 3	4.37	Aug. 1	4.60	Oct. 3	4.37
Feb. 5	5.87	June 1	4.09	Sept. 7	4.40	Nov. 30	4.57
Apr. 3	5.31	July 10	3.90				

845. City of Wichita. SW<sub>4</sub><sup>1</sup>SW<sub>4</sub><sup>1</sup> sec. 5, T. 27 S., R. 1 E. Records available: 1939-50. Measurement discontinued.

846. City of Wichita. SW<sub>4</sub><sup>1</sup>SE<sub>4</sub><sup>1</sup> sec. 6, T. 27 S., R. 1 E. Records available: 1939-49. Measurement discontinued.

847. City of Wichita. SW<sub>4</sub><sup>1</sup>SE<sub>4</sub><sup>1</sup> sec. 6, T. 27 S., R. 1 E. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 25 feet. Highest water level 10.55 below lsd, May 8, 1944; lowest 18.36 below lsd, Dec. 5, 1947. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	16.29	Apr. 3	16.26	July 10	11.64	Oct. 2	14.13
Feb. 5	16.35	May 3	13.77	Aug. 1	13.58	Nov. 7	15.59
Mar. 1	16.19	June 1	13.06	Sept. 7	13.89	30	15.85

870. W. Williams. NW<sub>4</sub><sup>1</sup>NE<sub>4</sub><sup>1</sup>NE<sub>4</sub><sup>1</sup> sec. 18, T. 25 S., R. 2 W. Driven stock and observation water-table well in Meade formation, diameter 1 $\frac{1}{4}$  inches, depth 19 feet. Highest water level 0.33 below lsd, July 10, 1951; lowest 8.30 below lsd, Nov. 5, 1940. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	5.86	May 3	4.13	Aug. 1	1.12	Nov. 7	1.81
Feb. 5	6.23	June 1	1.92	Sept. 7	.55	30	4.65
Apr. 3	7.21	July 10	.33	Oct. 2	1.12		

1171. City of Wichita. NE<sub>4</sub><sup>1</sup>NE<sub>4</sub><sup>1</sup> sec. 4, T. 25 S., R. 2 W. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 20 feet. Highest water level 9.78 below lsd, Oct. 2, 1951; lowest 13.86 below lsd, Apr. 3, 1951. Records available: 1950-51. Feb. 3, 1950, 11.79; Apr. 17, 12.59; June 29, 13.25; Oct. 4, 11.93; Jan. 4, 1951, 12.63; Apr. 3, 13.86; Oct. 2, 9.78.

1176. City of Wichita. SW<sub>4</sub><sup>1</sup>SW<sub>4</sub><sup>1</sup> sec. 5, T. 25 S., R. 1 W. Driven observation water-table well in alluvium, diameter 1 $\frac{1}{4}$  inches, depth 32 feet. Highest water level 10.42 below lsd, Oct. 3, 1951; lowest 15.69 below lsd, Jan. 4, 1951. Records available: 1950-51. Feb. 3, 1950, 11.59; June 30, 11.50; Oct. 4, 12.30; Jan. 4, 1951, 15.69; Apr. 3, 14.64; Oct. 3, 10.42.

2083. Dora E. Treaser. SE<sub>4</sub><sup>1</sup>NW<sub>4</sub><sup>1</sup>SW<sub>4</sub><sup>1</sup> sec. 14, T. 25 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 7 inches, depth 50 feet. Highest water level 2.60 below lsd, July 9, 1951; lowest 5.68 below lsd, June 29, 1950. Records available: 1950-51. Feb. 3, 1950, 5.02; Apr. 17, 5.03; June 29, 5.68; Oct. 4, 3.50; Apr. 3, 1951, 4.82; July 9, 2.60; Oct. 3, 3.44.

3004. City of Wichita. SE<sub>4</sub><sup>1</sup> sec. 1, T. 25 S., R. 3 W. Driven observation water-table well in McPherson formation, diameter 1 $\frac{1}{4}$  inches, depth 20 feet. Highest water level 4.42 below lsd, July 9, 1951; lowest 8.91 below lsd, June 29, 1950. Records available: 1949-51. Jan. 4, 8.05; Apr. 3, 8.06; July 9, 4.42; Oct. 2, 5.28.

3030. City of Wichita. SW<sub>4</sub><sup>1</sup>NW<sub>4</sub><sup>1</sup>SW<sub>4</sub><sup>1</sup> sec. 11, T. 25 S., R. 2 W. Driven observation water-table well in alluvium, diameter 1 $\frac{1}{4}$  inches, depth 32 feet. Highest water level 4.24 below lsd, July 10, 1951; lowest 8.32 below lsd, Apr. 3, 1951. Records available: 1950-51.

## 3030--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 31, 1950	7.40	Sept. 1, 1950	4.73	Mar. 1, 1951	8.06	July 10, 1951	4.24
May 4	7.48	Oct. 3	6.25	Apr. 3	8.32	Aug. 1	5.27
June 29	7.78	Nov. 1	6.80	May 3	7.70	Oct. 3	5.35
Aug. 4	5.82	Dec. 1	7.18	June 1	5.25	Nov. 7	5.64

M-25b. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 1, T. 25 S., R. 2 W. Drilled observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 51 feet. Highest water level 6.89 below lsd, Aug. 21, 1939; lowest 18.25 below lsd, Feb. 2, Apr. 30, May 31, 1951. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	18.23	Apr. 2	17.97	July 2	13.58	Oct. 1	13.90
Feb. 2	18.25	30	18.25	30	15.58	Nov. 2	15.30
28	17.48	May 31	18.25	Aug. 31	16.74	30	14.79

M-27. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 25 S., R. 2 W. Drilled public supply water-table well in alluvium and Meade formation, diameter 18 inches, depth 215 feet. Highest water level 13.96 below lsd, July 8, 1949; lowest 58.0 below lsd, Mar. 31, June 6, 29, 1950. Records available: 1947, 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	53.50	Apr. 2	19.00	July 2	54.00	Oct. 1	18.00
Feb. 2	52.00	May 1	21.00	30	53.00	Nov. 2	51.00
28	19.00	31	57.00	Aug. 31	54.00	30	17.50

M-27a. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade formation, diameter 1 $\frac{1}{4}$  inches, depth 82 feet. Highest water level 15.12 below lsd, Sept. 2, 1949; lowest 23.25 below lsd, Nov. 30, 1950. Records available: 1947, 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	23.00	Apr. 2	20.72	July 30	20.73	Nov. 2	19.94
Feb. 2	24.06	May 1	21.55	31	21.78	30	17.73
28	20.80	July 2	20.84	Oct. 1	17.64		

M-27b. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 3, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade formation, diameter 1 $\frac{1}{4}$  inches, depth 80 feet. Highest water level 12.62 below lsd, Oct. 4, 1948; lowest 22.73 below lsd, Feb. 2, 1951. Records available: 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	21.63	Apr. 2	20.37	July 2	19.35	Oct. 1	17.12
Feb. 2	22.73	May 1	20.31	30	19.34	Nov. 2	19.64
28	20.37	31	20.10	Aug. 31	21.45	30	17.29

M-28. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 25 S., R. 2 W. Drilled public supply water-table well in alluvium and Meade formation, diameter 18 inches, depth 220 feet. Highest water level 14.09 below lsd, July 8, 1949; lowest 69.0 below lsd, Aug. 1, 30, 1950. Records available: 1947, 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	16.50	Apr. 2	21.00	July 2	18.00	Oct. 1	18.00
Feb. 2	22.00	May 1	19.00	30	17.50	Nov. 2	18.00
28	21.00	31	18.50	Aug. 31	18.00	30	18.00

M-28a. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade formation, diameter 1 $\frac{1}{4}$  inches, depth 80 feet. Highest water level 14.39 below lsd, Sept. 2, 1949; lowest 21.57 below lsd, Aug. 30, 1950. Records available: 1947, 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	19.87	Apr. 2	21.18	July 2	19.25	Oct. 1	18.66
Feb. 2	21.44	May 1	20.93	30	18.77	Nov. 2	18.46
28	21.20	31	20.24	Aug. 31	19.63	30	18.51

M-28b. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 2, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade formation, diameter 1 $\frac{1}{4}$  inches, depth 82 feet. Highest water level 12.55 below lsd, Oct. 4, 1948; lowest 20.72 below lsd, Feb. 2, 1951. Records available: 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	20.15	Apr. 2	20.53	July 2	18.59	Oct. 1	18.05
Feb. 2	20.72	May 1	20.27	30	18.09	Nov. 2	17.50
28	20.53	31	18.60	Aug. 31	17.83	30	17.93

M-29. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 25 S., R. 2 W. Drilled public supply water-table well in alluvium and Meade formation, diameter 18 inches, depth 225 feet. Highest water level 13.01 below lsd, July 8, 1949; lowest 62.0 below lsd, Aug. 1, 1950. Records available: 1947, 1949-51.

## M-29--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	18.0	Apr. 2	20.0	July 2	15.0	Oct. 1	15.0
Feb. 2	54.0	May 1	60.0	30	17.0	Nov. 2	51.0
28	59.0	31	56.0	Aug. 31	57.0	30	53.0

M-29a. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade formation, diameter 1 $\frac{1}{4}$  inches, depth 97 feet. Highest water level 12.15 below lsd, July 1, 1947; lowest 32.71 below lsd, Feb. 28, 1951. Records available: 1947, 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	17.88	Apr. 2	20.18	July 2	15.41	Oct. 1	15.00
Feb. 2	32.35	May 1	32.69	30	17.67	Nov. 2	28.07
28	32.71	31	30.43	Aug. 31	30.75	30	28.73

M-29b. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade formation, diameter 1 $\frac{1}{4}$  inches, depth 103 feet. Highest water level 7.01 below lsd, July 2, 1951; lowest 24.52 below lsd, May 3, 1950. Records available: 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	10.14	Apr. 2	11.08	July 2	7.01	Oct. 1	7.49
Feb. 2	10.69	May 1	11.13	30	7.59	Nov. 2	7.78
28	11.14	31	8.07	Aug. 31	8.44	30	8.36

M-30. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 25 S., R. 2 W. Drilled public supply water-table well in alluvium and Meade formation, diameter 18 inches, depth 225 feet. Highest water level 7.31 below lsd, July 8, 1949; lowest 59.5 below lsd, Nov. 30, 1950. Records available: 1947, 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	18.00	Apr. 2	58.50	July 2	13.50	Oct. 1	14.00
Feb. 2	56.00	May 1	18.50	30	54.00	Nov. 2	17.50
28	19.00	31	16.50	Aug. 31	17.00	30	18.00

M-30a. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade formation, diameter 1 $\frac{1}{4}$  inches, depth 72 feet. Highest water level 12.32 below lsd, Oct. 1, 1951; lowest 24.69 below lsd, Feb. 2, 1951. Records available: 1947, 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	15.73	Apr. 2	24.07	July 2	12.68	Oct. 1	12.32
Feb. 2	24.69	May 1	17.18	30	21.06	Nov. 2	15.41
28	17.40	31	15.56	Aug. 31	15.92	30	15.50

M-30b. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 11, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade formation, diameter 1 $\frac{1}{4}$  inches, depth 61 feet. Highest water level 7.39 below lsd, Oct. 4, 1948; lowest 21.70 below lsd, Feb. 2, 1951. Records available: 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	16.39	Apr. 2	21.13	July 2	13.16	Oct. 1	13.82
Feb. 2	21.70	May 1	17.22	30	18.33	Nov. 2	16.85
28	17.44	31	15.80	Aug. 31	16.18	30	13.85

M-31. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 25 S., R. 2 W. Drilled public supply water-table well in alluvium and Meade formation, diameter 18 inches, depth 197 feet. Highest water level 9.20 below lsd, July 8, 1949; lowest 59.0 below lsd, Oct. 31, 1950. Records available: 1947, 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	21.00	Apr. 2	20.00	July 2	16.50	Oct. 1	16.00
Feb. 2	20.00	May 1	19.00	30	52.00	Nov. 2	55.50
28	19.00	31	55.00	Aug. 31	20.00	30	58.00

M-31a. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade formation, diameter 1 $\frac{1}{4}$  inches, depth 87 feet. Highest water level 9.95 below lsd, July 16, 1947; lowest 23.71 below lsd, Oct. 31, 1950. Records available: 1947, 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	19.70	Apr. 2	18.27	July 2	15.09	Oct. 1	14.12
Feb. 2	18.00	May 1	18.58	30	19.73	Nov. 2	21.76
28	17.49	31	20.55	Aug. 31	18.33	30	21.22

M-31b. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade formation, diameter 1 $\frac{1}{4}$  inches, depth 62 feet. Highest water level 8.34 below lsd, July 7, 1948; lowest 22.50 below lsd, Oct. 31, 1950. Records available: 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	21.04	Apr. 2	19.61	July 2	16.51	Oct. 1	15.50
Feb. 2	19.35	May 1	18.54	30	18.77	Nov. 2	20.85
28	18.83	31	19.59	Aug. 31	19.43	30	20.29

M-32. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 25 S., R. 2 W. Drilled public supply water-table well in alluvium and Meade gravel, diameter 18 inches, depth 185 feet. Highest water level 9.02 below lsd, July 8, 1949; lowest 56.00 below lsd, Apr. 2, 1951. Records available: 1947, 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	55.50	Apr. 2	56.00	July 2	53.50	Oct. 1	15.00
Feb. 2	54.00	May 1	19.00	30	51.50	Nov. 2	54.50
28	55.50	31	16.00	Aug. 31	14.00	30	16.00

M-32a. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade gravel, diameter 1 $\frac{1}{4}$  inches, depth 71 feet. Highest water level 9.96 below lsd, Apr. 16, 1947; lowest 21.00 below lsd, Apr. 2, 1951. Records available: 1947, 1949-51.

Jan. 3	19.64	Apr. 2	21.00	July 2	15.96	Oct. 1	13.08
Feb. 2	19.73	May 1	18.38	30	15.96	Nov. 2	17.79
28	18.77	31	15.44	Aug. 31	15.80	30	14.52

M-32b. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade gravel, diameter 1 $\frac{1}{4}$  inches, depth 71 feet. Highest water level 8.40 below lsd, Oct. 4, 1948; lowest 19.29 below lsd, Feb. 28, 1951. Records available: 1947-51.

Jan. 3	19.27	Apr. 2	20.46	July 2	15.14	Oct. 1	14.35
Feb. 2	20.16	May 1	19.63	30	15.49	Nov. 2	16.18
28	19.29	31	15.95	Aug. 31	15.76	30	15.38

M-33. City of Wichita. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 1, T. 25 S., R. 2 W. Drilled public supply water-table well in alluvium and Meade gravel, diameter 18 inches, depth 170 feet. Highest water level 7.23 below lsd, July 8, 1949; lowest 61.50 below lsd, Jan. 3, Apr. 30, 1951. Records available: 1947, 1949-51.

Jan. 3	61.50	Apr. 2	19.00	July 2	13.50	Oct. 1	15.00
Feb. 2	19.00	30	61.50	30	16.00	Nov. 2	17.00
28	18.50	May 31	14.00	Aug. 31	20.00	30	17.50

M-33a. City of Wichita. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 1, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade gravel, diameter 1 $\frac{1}{4}$  inches, depth 54 feet. Highest water level 9.2 below lsd, Sept. 2, 1949; lowest 19.12 below lsd, Apr. 30, 1951. Records available: 1947, 1949-51.

Jan. 3	18.69	Apr. 2	17.93	July 2	11.74	Oct. 1	13.86
Feb. 2	17.81	30	19.12	30	13.80	Nov. 2	14.13
28	17.11	May 31	12.94	Aug. 31	16.03	30	14.96

M-33b. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 1, T. 25 S., R. 2 W. Drilled observation water-table well in alluvium and Meade gravel, diameter 1 $\frac{1}{4}$  inches, depth 75 feet. Highest water level 6.82 below lsd, Oct. 4, 1948; lowest 16.74 below lsd, Apr. 30, 1951. Records available: 1947-51.

Jan. 3	16.42	Apr. 2	15.88	July 2	9.65	Oct. 1	11.82
Feb. 2	15.75	30	16.74	30	11.79	Nov. 2	12.09
28	15.10	May 31	10.88	Aug. 31	13.98	30	11.93

M-34. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 6, T. 25 S., R. 1 W. Drilled public supply water-table well in alluvium and Meade gravel, diameter 18 inches, depth 150 feet. Highest water level 6.96 below lsd, July 8, 1949; lowest 56.63 below lsd, Jan. 3, 1951. Records available: 1947, 1949-51.

Jan. 3	56.63	Apr. 2	21.10	July 2	52.72	Oct. 1	54.48
Feb. 2	53.01	30	52.42	30	52.30	Nov. 2	51.80
28	55.16	May 31	15.87	Aug. 31	54.38	30	52.77

M-34a. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 6, T. 25 S., R. 1 W. Drilled observation water-table well in alluvium and Meade gravel, diameter 1 $\frac{1}{4}$  inches, depth 85 feet. Highest water level 8.90 below lsd, Sept. 2, 1949; lowest 23.03 below lsd, Jan. 3, 1951. Records available: 1947, 1949-51.

Jan. 3	23.03	Apr. 2	19.71	July 2	18.56	Oct. 1	19.76
Feb. 2	22.84	30	22.96	30	18.76	Nov. 2	19.55
28	21.69	May 31	14.55	Aug. 31	20.00	30	19.37

M-34b. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 6, T. 25 S., R. 1 W. Drilled observation water-table well in alluvium and Meade gravel, diameter 1 $\frac{1}{4}$  inches, depth 85 feet. Highest water level 5.64 below lsd, July 7, 1948; lowest 17.94 below lsd, Feb. 2, 1951. Records available: 1947-51.

## M-34b--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	17.09	Apr. 2	17.79	July 2	13.25	Oct. 1	12.67
Feb. 2	17.94	30	17.57	30	12.48	Nov. 2	13.70
28	16.33	May 31	12.74	Aug. 31	14.06	30	14.96

M-35. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 25 S., R. 1 W. Drilled public supply water-table well in alluvium and Meade formation, diameter 18 inches, depth 130 feet. Highest water level 10.30 below lsd, July 8, 1949; lowest 50.0 below lsd, Sept. 29, 1950. Records available: 1947, 1949-51.

Jan. 3	46.18	Apr. 2	49.86	July 2	46.26	Oct. 1	48.61
Feb. 2	19.12	May 1	19.96	30	46.80	Nov. 2	46.60
28	19.71	31	48.99	Aug. 31	47.68	30	16.34

M-35a. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 25 S., R. 1 W. Drilled observation water-table well in alluvium and Meade formation, diameter 1 $\frac{1}{4}$  inches, depth 85 feet. Highest water level 8.69 below lsd, Sept. 2, 1949; lowest 20.88 below lsd, May 1, 1951. Records available: 1947, 1949-51.

Jan. 3	19.97	Apr. 2	20.53	July 2	17.90	Oct. 1	17.64
Feb. 2	19.56	May 1	20.88	30	17.02	Nov. 2	17.72
28	19.82	31	17.65	Aug. 31	17.47	30	17.59

M-35b. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 6, T. 25 S., R. 1 W. Drilled observation water-table well in alluvium and Meade formation, diameter 1 $\frac{1}{2}$  inches, depth 86 feet. Highest water level 10.60 below lsd, Sept. 2, 1949; lowest 22.30 below lsd, Apr. 2, 1951. Records available: 1947-51.

Jan. 3	21.72	Apr. 2	22.30	July 2	17.67	Oct. 1	17.86
Feb. 2	19.74	May 1	20.62	30	17.56	Nov. 2	18.08
28	20.14	31	17.39	Aug. 31	18.07	30	16.84

Seward County

15. Cabot Carb. Formerly R. H. Hitch. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 32 S., R. 33 W. Drilled domestic and stock water-table well in alluvium, diameter 5 inches, depth 53 feet. Highest water level 15.88 below lsd, May 3, 1944; lowest 18.81 below lsd, Nov. 28, 1951. Records available: 1940-51.

Jan. 18	17.64	June 11	16.98	Sept. 18	17.75	Nov. 28	18.81
May 9	17.71	Aug. 22	17.23	Oct. 25	17.85	Dec. 18	17.72

106. Kansas City Life Insurance Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 8, T. 32 S., R. 34 W. Drilled unused water-table well in Meade and Ogallala formations, diameter 5 inches, depth 212 feet. Highest water level 204.56 below lsd, Apr. 18, 1947; lowest 210.95 below lsd, Mar. 8, 1949. Records available: 1940-51.

Jan. 18	205.30	Apr. 19	205.22	July 9	207.53	Nov. 28	205.36
Feb. 21	205.18	May 9	205.22	Aug. 22	205.00	Dec. 18	206.00
Mar. 12	205.40	June 11	206.99	Oct. 25	204.88		

122. Mrs. Flora Atwell. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 33 S., R. 31 W. Drilled domestic and stock water-table well in Meade and Ogallala formations, diameter 5 inches, depth 213 feet. Highest water level 199.16 below lsd, Apr. 19 and May 9, 1951; lowest 205.76 below lsd, Oct. 21, 1947. Records available: 1940-51.

Jan. 18	202.09	Apr. 19	199.16	Aug. 22	200.56	Nov. 28	200.28
Feb. 21	202.60	May 9	199.16	Sept. 18	200.86	Dec. 18	200.81
Mar. 12	201.16	June 11	199.96	Oct. 25	203.47		

31-34-17cb. Carrie Young. Drilled stock water-table well in Meade and Ogallala formations, diameter 5 inches, depth 131 feet. Highest water level 118.05 below lsd, Oct. 25, 1951; lowest 120.86 below lsd, Mar. 14, 1950. Records available: 1950-51. Jan. 18, 119.29; Feb. 21, 118.73; July 9, 118.62; Oct. 25, 118.05; Nov. 28, 118.10; Dec. 18, 118.22.

Shawnee County

11-15-16c. State Board of Agriculture. Drilled observation water-table well in alluvium, diameter 18 inches, depth 47 feet. Highest water level 8.87 below lsd, July 16, 1951; lowest 26.22 below lsd, July 3, 1950. Records available: 1950-51.

11-15-16c--Continued.

## Daily mean water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	24.63	25.09	25.34	25.55	25.61	24.61	21.92	13.88	15.60	15.85	18.28	19.82
2	24.64	25.10	25.34	25.55	25.60	24.62	21.89	14.05	15.67	15.92	18.38	19.84
3	24.65	25.10	25.35	25.55	25.56	24.64	21.92	14.30	15.66	16.01	18.40	19.87
4	24.68	25.11	25.36	25.55	25.51	24.65	21.96	14.54	15.45	16.14	18.43	19.92
5	24.70	25.12	25.36	25.56	25.44	24.65	21.97	14.74	14.64	16.32	18.50	19.94
6	24.73	25.12	25.36	25.56	25.37	24.65	21.82	14.92	13.94	16.43	18.56	19.96
7	24.76	25.14	25.37	25.56	25.31	24.64	21.52	15.12	13.53	16.49	18.65	20.04
8	24.77	25.15	25.39	25.56	25.24	24.64	21.29	15.29	13.32	16.54	18.70	20.13
9	24.77	25.17	25.41	25.56	25.18	24.63	21.24	15.46	13.21	16.58	18.76	20.20
10	24.78	25.18	25.42	25.57	25.12	24.61	21.17	15.61	13.24	16.64	18.84	20.23
11	24.80	25.18	25.43	25.58	25.07	24.59	20.83	15.75	13.32	16.70	18.89	20.25
12	24.82	25.19	25.45	25.58	25.02	24.56	17.66	15.87	13.44	16.78	18.92	20.28
13	24.84	25.20	25.45	25.59	24.98	24.54	11.42	15.93	13.60	16.87	18.93	20.33
14	24.85	25.23	25.45	25.59	24.93	24.52	9.32	15.94	13.70	16.97	19.00	20.36
15	24.86	25.23	25.47	25.60	24.89	24.50	8.93	16.01	13.82	17.03	19.06	20.44
16	24.88	25.24	25.47	25.60	24.85	24.48	8.87	16.11	13.90	17.10	19.13	20.49
17	24.88	24.25	25.48	25.60	24.81	24.44	9.47	16.20	13.93	17.22	19.21	20.51
18	24.89	25.27	25.49	25.60	24.77	24.43	10.13	16.31	14.02	17.31	19.25	20.54
19	24.90	25.27	25.50	25.60	24.74	24.41	10.55	16.40	14.12	17.40	19.28	20.56
20	24.91	25.28	25.51	25.61	24.71	24.38	10.95	16.45	14.24	17.42	19.31	20.58
21	24.93	25.28	25.53	25.61	24.69	24.33	11.30	16.57	14.44	17.46	19.32	20.64
22	24.94	25.31	25.53	25.62	24.67	24.28	11.77	16.66	14.69	17.56	19.37	20.68
23	24.94	25.33	25.53	25.63	24.64	24.20	12.06	16.75	14.86	17.67	19.46	20.74
24	24.96	25.33	25.54	25.62	24.61	24.09	12.24	16.78	14.99	17.75	19.51	20.79
25	24.98	25.32	25.54	25.62	24.60	23.93	12.47	16.69	15.12	17.81	19.55	20.83
26	24.99	25.32	25.55	25.63	24.60	23.70	12.67	16.52	15.20	17.88	19.61	20.90
27	25.00	25.33	25.54	25.63	24.61	23.08	12.86	16.16	15.42	17.95	19.65	20.94
28	23.03	25.33	25.55	25.62	24.61	22.52	13.00	15.85	15.60	18.01	19.69	20.93
29	25.06		25.55	25.62	24.61	22.18	13.17	15.62	15.68	18.05	19.72	20.94
30	25.08		25.55	25.61	24.61	21.99	13.37	15.53	15.76	18.09	19.77	20.98
31	25.08		25.55		24.61		13.66	15.52		18.18		21.01

11-16-5bc. C. C. Busey. Dug unused water-table well in White Cloud shale, diameter 6 feet, depth 23 feet, cribbed with rock. Highest water level 1.27 below lsd, Apr. 15, 1949; lowest 11.80 below lsd, Nov. 27, 1948. Records available: 1948-51. Apr. 17, 5.50; Aug. 1, 2.60; Sept. 27, 2.86; Nov. 27, 4.73.

Sherman County

8-37-28abb. Albert Vohs. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 125 feet. Highest water level 107.30 below lsd, July 14, 1948; lowest 107.85 below lsd, Jan. 6, 1949. Records available: 1948-51. Jan. 8, 107.39; Apr. 24, 107.39; July 18, 107.42; Oct. 17, 107.38.

8-39-19caa. Wm. Hall (City of Goodland). Drilled unused water-table well in sand and Ogallala formation, diameter 6 inches, depth 165 feet. Highest water level 118.13 below lsd, Apr. 24, 1951; lowest 152.38 below lsd, Oct. 9, 1950. Records available: 1950-51. Jan. 8, 150.70; Apr. 24, 118.13; July 18, 150.34; Oct. 18, 150.32.

8-40-24baa. Victoria Van Drasek Estate. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 164 feet. Highest water level 135.92 below lsd, Apr. 25, 1950; lowest 137.41 below lsd, Jan. 8, 1951. Records available: 1948-51. Jan. 8, 137.41; Apr. 24, 136.44; July 18, 136.28; Oct. 18, 136.43.

9-39-30cbb. Charles Glenn. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 145 feet. Highest water level 118.42 below lsd, July 19, Oct. 18, 1951; lowest 118.90 below lsd, Apr. 14, 1949. Records available: 1948-51. Jan. 9, 118.50; Apr. 24, 118.53; July 19, 118.42; Oct. 18, 118.42.

Smith County

4-14-34bc. Laura Davis. Dug stock and observation water-table well in terrace gravel, diameter 32 inches, depth 46 feet, cribbed with rock. Highest water level 39.49 below lsd, Dec. 10, 1951; lowest 45.37 below lsd, Mar. 22, 1951. Records available: 1945-51. Jan. 19, 43.62; Mar. 22, 45.37; May 14, 43.85; July 24, 43.05; Aug. 27, 42.40; Oct. 22, 39.75; Dec. 10, 41.39.

4-15-31bb. Wilbur Lala. Drilled stock and observation water-table well in alluvium and terrace deposits, diameter 8 inches, depth 43 feet. Highest water level 25.56 below lsd, May 14, 1951; lowest 36.26 below lsd, Nov. 30, 1948. Records available: 1945-51. Jan. 19, 34.44; Mar. 22, 25.74; May 14, 25.56; July 24, 33.40; Aug. 27, 30.90; Oct. 22, 31.40; Dec. 11, 31.39.

4-15-35bc. H. R. Dannenburg. Dug stock and observation water-table well in terrace gravels, diameter 4 feet, depth 40 feet, cribbed with rock. Highest water level 10.18 below lsd, July 24, 1951; lowest 37.99 below lsd, June 12, 1946. Records available: 1945-51. Jan. 19, 32.73; Mar. 20, 33.83; July 24, 10.18; Aug. 27, 15.67; Oct. 22, 19.57.

5-13-4dc. Roy Eller. Dug domestic and stock water-table well in alluvium, diameter 24 inches, depth 43 feet, cribbed with rock. Highest water level 10.78 below lsd, July 24, 1951; lowest 35.28 below lsd, Dec. 17, 1945. Records available: 1945-51. Jan. 19, 15.80; Mar. 20, 15.03; May 14, 14.44; July 24, 10.78; Aug. 27, 11.98; Oct. 22, 12.41; Dec. 10, 12.73.

5-13-25cc. Zelma Carter. Drilled domestic and observation water-table well in terrace sand and gravels, diameter 10 inches, depth 52 feet. Highest water level 38.50 below lsd, Dec. 10, 1951; lowest 46.53 below lsd, Jan. 28, 1946. Records available: 1945-51. Jan. 19, 42.27; Mar. 20, 42.15; May 14, 42.35; July 24, 40.93; Aug. 27, 39.99; Oct. 22, 39.06; Dec. 10, 38.50.

5-13-33ba. W. L. Gearhart and others. Dug unused water-table well in terrace gravels, diameter 4 feet, depth 39 feet. Highest water level 10.16 below lsd, July 24, 1951; lowest 30.46 below lsd, Jan. 2, 1948. Records available: 1945-51. Jan. 19, 23.35; Mar. 2, 23.59; May 14, 23.22; July 24, 10.16; Aug. 27, 11.96; Oct. 22, 12.93; Dec. 10, 14.17.

5-14-3bc. Walter Felsburg. SW<sub>1/4</sub>NW<sub>1/4</sub> sec. 3, T. 5 S., R. 14 W. Drilled well, diameter 12 inches, depth 49 feet. Records available: 1946-50. Measurement discontinued.

5-15-2dc. George K. Wamhoff. Drilled unused water-table well in terrace alluvium, diameter 10 inches, depth 42 feet. Highest water level 23.95 below lsd, Oct. 22, 1951; lowest 33.84 below lsd, Nov. 30, 1948. Records available: 1945-51. Jan. 19, 30.26; Mar. 20, 32.58; May 14, 31.75; July 25, 25.55; Oct. 22, 23.95; Dec. 11, 24.00.

#### Stafford County

19. Atlantic Refining Co. SE<sub>1/4</sub>SE<sub>1/4</sub> sec. 27, T. 21 S., R. 13 W. Drilled observation water-table well in Meade formation, diameter 6 inches, depth 63 feet. Highest water level 0.40 above lsd, Aug. 29, Sept. 20, 1950; lowest 11.04 below lsd, Aug. 1, 1942. Records available: 1942-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	1.54	Apr. 16	1.67	July 10	1.23	Oct. 22	1.75
Feb. 12	1.40	May 14	.85	Aug. 20	1.51	Nov. 20	1.37
Mar. 21	1.44	June 26	.60	Sept. 24	1.74	Dec. 12	1.47

25-13-3bb. M. L. Halley. Driven unused water-table well in Meade formation, diameter 4 inches, depth 30 feet. Highest water level 5.28 below lsd, Nov. 20, 1951; lowest 6.65 below lsd, Dec. 20, 1951. Records available: 1951. Aug. 20, 5.94; Sept. 24, 5.33; Oct. 22, 5.54; Nov. 20, 5.28; Dec. 20, 6.65.

#### Stanton County

13. Leah Carrithers. NE<sub>1/4</sub>SE<sub>1/4</sub> sec. 21, T. 27 S., R. 40 W. Drilled unused water-table well, diameter 5 inches, depth 55 feet. Highest water level 44.37 below lsd, Nov. 29, 1951; lowest 51.83 below lsd, Apr. 3, 1940. Records available: 1939-51. Nov. 29, 44.37.

93. J. Plummer. NE<sub>1/4</sub> sec. 11, T. 29 S., R. 41 W. Drilled observation water-table well in coarse gravel, diameter 8 inches, depth 234 feet. Highest water level 173.71 below lsd, Nov. 29, 1951; lowest 180.65 below lsd, Nov. 16, 1949. Records available: 1939-51. Feb. 22, 174.04; May 10, 174.58; Nov. 29, 173.71.

146. C. M. Harrison. SW<sub>1/4</sub>SE<sub>1/4</sub> sec. 27, T. 30 S., R. 43 W. Drilled unused water-table well in Dakota formation, diameter 5 inches, depth 55 feet. Highest water level 31.54 below lsd, Nov. 29, 1951; lowest 46.30 below lsd, Apr. 22, May 14, June 18, 1940. Records available: 1939-51. Feb. 22, 32.90; May 10, 32.89; Aug. 23, 31.76; Nov. 29, 31.54. Measurement discontinued.

#### Stevens County

10. T. P. Patterson. NW<sub>1/4</sub>SW<sub>1/4</sub> sec. 21, T. 33 S., R. 37 W. Drilled irrigation water-table well in Rexroad and/or Meade formation, diameter 16 inches, depth 375 feet. Highest water level 79.92 below lsd, Feb. 21, 1948; lowest 93.20 below lsd, May 10, 1945. Records available: 1942-51. May 9, 83.80. Measurement discontinued.

12. Mack Greenwood. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 28, T. 33 S., R. 38 W. Drilled unused water-table well in Rexroad and/or Meade formation, diameter 4 inches, depth 153 feet. Highest water level 105.59 below lsd, Nov. 28, 1951; lowest 113.38 below lsd, July 28, 1942. Records available: 1942-51. Feb. 21, 106.41; May 9, 106.12; Aug. 22, 105.80; Nov. 28, 105.59.

30. Central Life Assurance Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 15, T. 33 S., R. 36 W. Drilled unused water-table well in Rexroad and/or Meade formation, diameter 4 inches, depth 121 feet. Highest water level 100.80 below lsd, Feb. 21, 1951; lowest 106.84 below lsd, Sept. 23, 1943. Records available: 1942-51. Feb. 21, 100.80; May 9, 100.83. Measurement discontinued.

#### Thomas County

7. City of Brewster. Formerly George Strait. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 8 S., R. 36 W. Drilled unused water-table well in sand and gravel, diameter 6 inches, depth 139 feet. Highest water level 122.99 below lsd, July 20, 1949; lowest 128.02 below lsd, Oct. 14, 1948. Records available: 1942-51. Jan. 8, 125.02; Apr. 24, 125.40; July 18, 124.64; Oct. 17, 125.00.

26. Thomas A. Ryan. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 27, T. 8 S., R. 32 W. Drilled unused water-table well in sand and gravel, diameter 8 inches, depth 159 feet. Highest water level 110.85 below lsd, Apr. 23, 1951; lowest 117.55 below lsd, Oct. 13, 1948. Records available: 1942-51. Jan. 8, 111.04; Apr. 23, 110.85; July 18, 112.39; Oct. 17, 113.34.

33. Arch Ball. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 9 S., R. 33 W. Drilled unused water-table well in sand, diameter 6 inches, depth 137 feet. Highest water level 115.34 below lsd, July 25, 1950; lowest 121.30 below lsd, Apr. 14, 1949. Records available: 1942-51. Apr. 23, 115.86; July 18, 116.58.

8-34-2aa. U. S. Dept. of Agriculture and Kansas Agricultural Experiment Station. NE $\frac{1}{4}$  sec. 2, T. 8 S., R. 34 W. Drilled unused water-table well, depth 160 feet. Highest water level 112.48 below lsd, Dec. 27, 1951; lowest 114.65 below lsd, Jan. 27, 1949. Records available: 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	113.22	Apr. 5	113.08	July 5	113.14	Oct. 4	112.86
11	113.13	12	113.14	12	113.16	11	112.75
18	113.15	19	113.11	19	113.04	18	112.82
25	113.12	26	113.10	26	113.03	25	112.77
Feb. 1	113.10	May 3	113.16	Aug. 2	113.01	Nov. 1	112.79
8	113.18	10	113.22	9	112.97	8	112.69
15	113.05	17	113.20	16	112.90	15	112.77
22	113.12	24	113.26	23	112.88	22	112.70
Mar. 1	113.08	31	113.27	30	112.90	29	112.68
8	113.09	June 7	113.23	Sept. 6	112.90	Dec. 6	112.77
15	113.03	14	113.26	13	112.88	13	112.55
22	112.97	21	113.20	20	112.82	20	112.58
29	113.03	28	113.15	27	112.85	27	112.48

#### Trego County

14-22-36aa. Formerly 14-22-36. U. S. Geol. Survey. Drilled observation water-table well in deposits of Pleistocene age and terrace gravel, diameter 1 $\frac{1}{4}$  inches, depth 74 feet. Highest water level 35.05 below lsd, Dec. 26, 1951; lowest 43.11 below lsd, Mar. 16, 1950. Records available: 1949-51. Jan. 17, 42.49; Mar. 15, 41.76; June 4, 38.31; July 26, 35.88; Oct. 26, 35.51; Dec. 26, 35.05.

#### Wallace County

11-40-15ddd. School District No. 14. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 57 feet. Highest water level 38.44 below lsd, Apr. 14, 1949; lowest 42.69 below lsd, May 17, 1948. Records available: 1948-51. Jan. 9, 42.20; Apr. 24, 42.33. Measurement discontinued.

12-40-14bba. W. P. Kirkham. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 21 feet. Highest water level 19.72 below lsd, July 20, 1949; lowest 20.75 below lsd, May 18, 1948. Records available: 1948-51. Jan. 9, 20.02; Apr. 24, 20.00; Oct. 18, 20.14.

13-40-10abb. J. Mumma. Drilled unused water-table well in deposits of Pleistocene age, diameter 24 inches, depth 44 feet. Highest water level 16.08 below lsd, May 18, 1948; lowest 20.10 below lsd, Oct. 14, 1948. Records available: 1948-51. Jan. 9, 19.33; Feb. 19, 18.72; Apr. 24, 19.42; Oct. 18, 19.26.

14-40-34ddd. C. Popp. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 91 feet. Highest water level 86.99 below lsd, Oct. 18, 1951; lowest 88.50 below lsd, Oct. 13, 1949. Records available: 1948-51. Jan. 9, 87.25; Feb. 19, 87.19; Apr. 24, 87.22; Oct. 18, 86.99.

15-40-23bbb. Broadway School District. Drilled unused water-table well in Ogallala formation, diameter 6 inches, depth 80 feet. Highest water level 76.15 below lsd, Oct. 18, 1951; lowest 78.45 below lsd, Jan. 9, 1951. Records available: 1948-51. Jan. 9, 78.45; Feb. 19, 76.32; Apr. 24, 76.40; Oct. 18, 76.15.

#### Wichita County

16-37-26abb. Richard G. Hobson. Drilled stock and observation water-table well in Ogallala formation, diameter 6 inches, depth 96 feet. Highest water level 82.22 below lsd, Aug. 14, 1951; lowest 90.52 below lsd, Dec. 16, 1949. Records available: 1947-51. Feb. 8, 87.34; Apr. 24, 87.29; June 10, 87.29; Aug. 14, 82.22; Oct. 18, 87.20; Dec. 10, 87.12.

18-35-14bb. A. C. Felt. Drilled domestic and observation water-table well in Ogallala formation, diameter 5 inches, depth 95 feet. Highest water level 81.33 below lsd, Aug. 11, 1949; lowest 83.37 below lsd, Oct. 12, 1949. Records available: 1947-51. Feb. 8, 82.59; Apr. 24, 82.50; June 18, 82.43; Aug. 14, 82.30; Oct. 18, 82.13; Dec. 10, 82.10.

18-37-11dcc. L. L. Barngrober. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 11, T. 18 S., R. 37 W. Drilled unused well, diameter 5 inches, depth 82 feet. Records available: 1947-50. Measurement discontinued.

20-36-14dad. Elmer Hartman. Drilled observation water-table well in Ogallala formation, diameter 6 inches, depth 116 feet. Highest water level 94.68 below lsd, Aug. 14, 1951; lowest 97.35 below lsd, Apr. 26, 1950. Records available: 1947-51. Feb. 8, 94.80; Apr. 24, 94.76; June 18, 94.74; Aug. 14, 94.68; Oct. 18, 94.69; Dec. 10, 94.66.

#### Woodson County

25-16-11ddd. John Yohon. Dug unused water-table well in Stanton limestone, diameter 5 feet, depth 20 feet, cribbed with rock. Highest water level 3.66 below lsd, Nov. 27, 1951; lowest 9.72 below lsd, Dec. 29, 1950. Records available: 1948-51. Apr. 18, 5.00; Aug. 2, 4.36; Sept. 28, 4.41; Nov. 27, 3.66.

#### Wyandotte County

97. U. S. Geol. Survey. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 15, T. 11 S., R. 25 E. Drilled observation well, diameter 1 $\frac{1}{4}$  inches, depth 69 feet. Records available: 1944-50. Measurement discontinued.

100. U. S. Geol. Survey. SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 22, T. 11 S., R. 25 E. Drilled observation well, diameter 1 $\frac{1}{4}$  inches, depth 79 feet. Records available: 1944-50. Measurement discontinued.

101. U. S. Geol. Survey. NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 23, T. 11 S., R. 25 E. Drilled observation water-table well in alluvium, diameter 1 $\frac{1}{4}$  inches, depth 98 feet. Highest water level 25.02 below lsd, July 11, 1945; lowest 44.55 below lsd, Dec. 31, 1948. Records available: 1944-48, 1950-51. Dec. 28, 37.69.

119. U. S. Geol. Survey. SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 20, T. 11 S., R. 25 E. Drilled observation water-table well in alluvium, diameter 1 $\frac{1}{4}$  inches, depth 79 feet. Highest water level 18.80 below lsd, Dec. 28, 1951; lowest 35.56 below lsd, Dec. 31, 1948. Records available: 1944-51. Dec. 28, 18.80.

121. U. S. Geol. Survey. NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 20, T. 11 S., R. 25 E. Drilled well, diameter 1 $\frac{1}{4}$  inches, depth 70 feet. Records available: 1944-48. Measurement discontinued.

## MINNESOTA

By Robert Schneider

### Scope of Water-Level Program

The observation-well program in Minnesota was continued in 1951 in cooperation with the Division of Waters of the State Department of Conservation. Measurements were made in 15 wells, 5 of which were equipped with recording gages. Measurements are given for 1948-50 for well B49-17-23caa, Carlton County, and for 1931-32, 1940-41, 1943-46, and 1948-50 for well B29-24-23cdal, Hennepin County. The preliminary results of an investigation of the geology and ground-water resources of the Cloquet area, Carlton County were published.<sup>1</sup>

#### Precipitation

The average precipitation for Minnesota in 1951, as reported by the U. S. Weather Bureau, was 31.00 inches or 5.82 inches above the average, the greatest recorded since 1905. Negative departures from normal precipitation were reported at only five stations in the extreme northwestern part of the State. The maximum positive departure from normal (17.46 inches) occurred in the southeast. The average precipitation for the State was slightly below normal during January, April, May, and July. The wettest month was August and the driest was January.

#### Interpretation of Water-Level Fluctuations

Water levels in most of the water-table wells were at their lowest stages in February and March. They rose slightly during March and very rapidly at the end of March and through April as a result of downward percolation of meltwater from snow and thawing ground. In several wells the highest levels were attained in May and June and a net decline occurred from then until the end of the year. In two wells, B49-17-22cbb and B49-17-27bab, Carlton County, the water levels reached a minor peak during the first half of April and then continued to rise for most of the remainder of the year. The water level in well 108-30-9add, Brown County, on May 2, 1951, 2.70 feet below lsd, was the highest for the 10-year period of record. As of the end of the year, water levels in water-table wells unaffected by pumping were from 0.10 foot to 6.29 feet higher than at the end of 1950.

#### Acknowledgments

The measurements in well B29-24-23cdal, Hennepin County, for the period 1931-32, were made by A. F. Meyer, Minneapolis. Those for the periods 1940-41, 1943-46, and 1948-50, were made by the Hennepin County Highway Department. I. M. Bottcher made the measurements in well 146-27-25cac, Itasca County. S. O. Hanson made most of the measurements in well B49-17-23caa, Carlton County, during 1950-51.

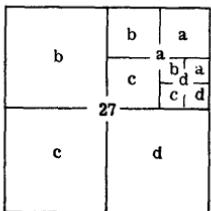
#### Well-Numbering System

Wells are numbered in accordance with the Bureau of Land Management system of land subdivision. The first numeral of a well number indicates the township, the second the range, and the third the section in which the well is situated. The lower-case letters, a, b, c, and d, following the section number locate the well within the section: the first letter denotes the quarter section (160-acre tract), the second the quarter-quarter section (40-acre tract), and the third the quarter-quarter-quarter section (10-acre tract). The letters are assigned in a counter-clockwise direction, beginning in the northeast quarter. If the location is known within a 10-acre tract, three lower-case letters are shown in the well number. When more than one well is situated in the smallest significant tract, consecutive numbers beginning with 1 are added as suffixes. Well numbers preceded by the capital letter B designate wells situated in the northwest quadrant of the 4th principal meridian and base line system. Well numbers not preceded by a capital letter designate wells situated in the northwest quadrant of the 5th principal meridian and base line system.

<sup>1</sup> Akin, P. D., Preliminary report on ground-water conditions in the Cloquet area, Carlton County, Minn.: U. S. Geol. Survey Report, Jan. 1951.

## MINNESOTA, CARLTON COUNTY

99



Section 27

**Well Descriptions and Water-Level Measurements**

(Water levels are in feet below land-surface datum unless otherwise indicated.)

Brown County

108-30-9-add. Formerly 108-30-9. Erwin Kjelshus. Drilled unused water-table well in glacial drift, diameter 16 inches, depth 32 feet. Highest water level 2.70 below lsd, May 2, 1951; lowest 12.71 below lsd, Nov. 13, 1950. Records available: 1942-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	10.96	Apr. 23	2.97	July 24	4.58	Oct. 17	4.94
Feb. 2	10.70	May 2	2.70	Aug. 2	4.80	23	4.67
7	11.07	7	3.30	8	4.35	Nov. 2	4.72
15	11.16	15	3.54	15	4.47	10	4.86
21	11.57	24	3.96	23	4.55	24	4.54
Mar. 1	7.44	June 4	3.43	Sept. 3	4.85	30	4.66
9	7.35	11	4.10	10	4.70	Dec. 4	3.90
14	7.25	18	4.09	17	4.22	11	4.26
22	7.39	24	4.04	25	4.50	18	4.56
Apr. 2	5.56	July 3	4.04	Oct. 4	4.75	24	4.69
7	3.30	10	4.05	10	4.77	31	4.77
17	2.92	17	4.35				

Carlton County

B49-17-18dcc2. Andrew H. Ketola. Dug unused water-table well in glacial gravel, diameter 4 feet, depth 14 feet. Highest water level 5.15 below lsd, Oct. 14, 1951; lowest 10.38 below lsd, Feb. 27, 1949. Records available: 1949-51.

Jan.	7	7.82	Apr.	8	5.45	July	8	6.22	Oct.	7	5.29
14	7.86		15	5.35		15	6.95		14	5.15	
21	7.93		22	5.44		22	7.37		21	5.31	
28	8.10		29	5.27		28	7.21		28	5.20	
Feb. 4	8.18		May 6	5.40		Aug. 5	5	7.15	Nov. 4	5.18	
11	8.29		13	5.40		12	7.31		11	5.28	
18	8.35		20	5.44		19	7.55		18	5.18	
24	7.37		27	5.42		26	7.78		24	5.18	
Mar. 4	7.22		June 3	5.20		Sept. 2	5.73		Dec. 2	5.32	
11	7.09		10	5.20		9	5.36		9	5.25	
18	6.87		17	5.32		16	5.36		16	5.32	
25	6.89		24	5.35		23	5.37		24	6.64	
Apr. 1	5.39		July 1	5.35		30	5.18		30	6.80	

B49-17-22ccb. U. S. Bureau of Indian Affairs. Drilled unused water-table well in glacial drift, diameter 5 inches, depth 85 feet. Highest water level 33.53 below lsd, Dec. 8, 15, 1951; lowest 38.17 below lsd, Apr. 8, 1950. Records available: 1949-51.

Jan.	6	34.79	Feb.	17	35.18	Mar.	29	35.13	May	12	35.19
13	34.87		23	35.20		Apr.	7	34.95	18	34.99	
20	34.89		Mar. 2	35.14		14	34.99		25	35.03	
26	34.91		9	35.21		21	35.02		June 2	34.97	
Feb. 2	34.99		16	35.15		28	35.31		9	34.85	
9	35.03		23	35.09		May 5	35.26		15	34.87	

B49-17-22ccb--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 23	34.69	Aug. 11	34.42	Sept. 27	34.09	Nov. 17	33.57
28	34.64	18	34.45	Oct. 6	33.98	24	33.59
July 7	34.56	25	34.43	13	33.99	Dec. 1	33.54
14	34.59	Sept. 1	33.71	20	33.92	8	33.53
21	34.47	8	33.69	27	33.82	15	33.53
28	34.41	15	34.17	Nov. 3	33.84	22	33.67
Aug. 4	34.43	22	34.13	10	33.58	29	34.19

B49-17-23caa. City of Cloquet. Drilled unused water-table well in glacial sand and gravel, diameter 12 inches, depth 51 feet, screen 26-46. Highest water level 6.30 below lsd, Sept. 18, 1951; lowest 10.83 below lsd, Feb. 7, 1950. Records available: 1948-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 4, 1948	6.75	June 15, 1949	9.40	Oct. 5, 1949	9.6	Aug. 20, 1951	7.34
June 2	7.51	22	9.00	Feb. 7, 1950	10.83	27	7.30
9	7.49	30	9.2	Mar. 16	9.60	Sept. 5	6.91
16	7.56	July 7	7.9	Apr. 16	7.51	10	6.38
23	7.91	14	8.3	June 19	7.42	18	6.30
30	8.11	28	9.4	Sept. 3	8.35	Oct. 9	6.48
July 8	8.34	Aug. 5	8.6	Oct. 20	7.74	15	6.60
15	8.57	12	8.9	27	8.15	Nov. 5	6.70
22	8.75	22	8.6	Nov. 10	8.5	27	6.46
29	8.56	31	9.1	17	8.0	Dec. 3	6.38
Aug. 5	8.66	Sept. 9	9.3	24	8.35	10	6.43
Oct. 25	9.81	16	9.4	Aug. 6, 1951	6.88	31	6.78
Feb. 7, 1949	9.53	28	9.5	13	7.06		

B49-17-27bab. Formerly 49-17-27ccb. Marge Bodway. Drilled unused water-table well in glacial drift, diameter 4 inches, depth 52 feet. Highest water level 35.63 below lsd, Dec. 29, 1951; lowest 40.47 below lsd, Apr. 15, 1950. Records available: 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	37.49	Apr. 7	37.19	July 7	36.95	Oct. 6	36.49
13	37.53	14	37.01	14	36.98	13	36.47
20	37.51	21	37.31	21	36.89	20	36.49
26	37.54	28	37.29	28	36.81	27	36.29
Feb. 2	37.61	May 5	37.46	Aug. 4	36.78	Nov. 3	36.27
9	37.64	12	37.54	11	36.79	10	36.06
17	37.66	18	37.29	18	36.74	17	36.04
23	37.69	25	37.31	25	36.78	24	35.89
Mar. 2	37.67	June 2	37.27	Sept. 1	36.73	Dec. 1	36.03
9	37.81	9	37.19	8	36.69	8	35.99
16	37.79	15	37.21	15	36.66	15	35.97
23	37.81	23	37.11	22	36.64	22	35.93
29	37.71	28	37.09	27	36.62	29	35.63

B49-17-28adc. James, Alfred, and Laura Jolicoeur. Drilled unused water-table well in glacial drift, diameter 1 inch, depth 15 feet. Highest water level 2.42 below lsd, Apr. 9, 1949; lowest 3.89 below lsd, Sept. 9, 1949. Records available 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	2.99	Apr. 7	2.85	July 7	2.58	Oct. 6	3.03
13	3.02	14	2.92	14	2.63	13	3.06
20	3.01	21	3.07	21	2.67	20	3.08
26	3.03	28	3.03	28	2.69	27	3.04
Feb. 2	3.02	May 5	2.54	Aug. 4	2.71	Nov. 3	3.01
9	3.03	12	2.68	11	2.70	10	2.97
17	2.96	18	2.71	18	2.74	17	2.89
23	2.99	25	2.83	25	2.69	24	2.86
Mar. 2	2.97	June 2	2.69	Sept. 1	2.92	Dec. 1	2.88
9	3.02	9	2.54	8	2.89	8	2.87
16	2.98	15	2.61	15	2.92	15	2.89
23	2.99	23	2.59	22	3.01	22	2.91
29	2.94	28	2.62	27	2.99	29	2.87

Clay County

137-45-30cdl. Formerly 137-45-30ccb1. City of Barnesville. Drilled unused water-table well in glacial drift, diameter 10 inches, depth 73 feet. Highest water level 3.48 below lsd, May 20, 1950; lowest 7.41 below lsd, Oct. 25, 27, 1949. Records available: 1949-51.

## MINNESOTA, CLAY COUNTY

101

137-45-30cdb1--Continued.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.75	7.08	6.96	6.01	5.50	5.70	5.58	5.96	6.25	....	6.16	5.95
2	6.77	7.09	6.95	6.03	5.47	5.64	5.67	6.0	6.24	....	6.13	5.91
3	6.79	7.13	6.93	5.85	5.49	5.06	5.62	6.0	6.25	....	6.17	5.82
4	6.84	7.14	6.93	5.73	5.48	4.96	5.33	6.04	6.26	....	6.17	5.70
5	6.85	7.14	....	5.61	5.51	4.97	5.27	6.0	6.24	....	6.17	5.67
6	6.83	7.16	....	5.58	5.52	5.02	5.24	....	6.28	h6.08	6.16	5.61
7	6.83	7.15	....	5.55	5.51	5.03	5.27	6.0	6.28	6.10	6.17	5.54
8	6.78	7.16	....	5.50	5.52	5.10	5.30	6.0	h6.08	6.02	6.14	5.49
9	6.84	7.15	....	5.56	5.59	5.14	5.39	6.08	....	6.02	6.15	5.45
10	6.87	7.12	h6.88	5.57	5.59	5.14	5.46	6.10	....	6.01	6.16	5.46
11	6.89	7.12	6.97	5.56	5.61	5.14	5.48	6.11	....	6.02	6.16	5.44
12	6.88	7.16	6.97	5.55	5.66	5.17	5.53	6.12	....	5.99	6.02	5.45
13	6.90	7.18	....	5.60	5.65	5.25	5.57	6.16	....	6.00	5.99	5.45
14	6.88	7.17	....	5.63	5.69	5.30	5.61	6.14	....	6.00	5.93	5.50
15	6.89	7.15	....	5.64	5.71	5.37	5.67	6.17	....	5.99	5.94	5.53
16	6.88	7.12	....	5.66	5.73	5.39	5.74	6.18	....	6.07	5.93	5.54
17	6.88	7.13	h6.76	5.65	5.76	5.45	5.73	6.18	....	6.06	5.9	5.57
18	6.91	7.13	6.94	5.68	5.73	5.50	5.77	6.21	....	6.08	5.87	5.64
19	6.91	7.17	6.94	5.72	5.73	5.52	5.83	6.22	....	6.07	5.85	5.65
20	6.95	7.19	....	5.70	5.72	5.44	5.79	6.23	....	6.03	5.82	5.66
21	6.94	7.18	....	5.69	5.75	5.45	5.87	6.26	....	6.06	5.86	5.71
22	6.87	7.23	....	5.63	5.77	5.50	5.88	6.27	....	6.09	5.85	5.78
23	6.90	7.23	....	5.60	5.80	5.52	5.94	6.28	....	6.09	5.87	5.78
24	6.96	7.16	....	5.60	5.81	5.56	5.99	6.29	....	6.08	5.90	5.80
25	6.94	7.09	....	5.57	5.78	5.58	5.98	6.30	....	6.09	5.88	5.83
26	6.96	6.98	....	5.59	5.76	5.49	5.98	6.31	....	6.09	5.94	5.86
27	6.96	6.97	....	5.57	5.79	5.48	5.79	6.32	....	6.06	5.96	5.85
28	6.95	6.93	....	5.53	5.80	5.49	5.78	6.31	....	6.04	5.96	5.82
29	6.92	....	....	5.51	5.86	5.55	5.80	6.29	....	6.07	6.00	5.92
30	6.92	....	....	5.48	5.87	5.59	5.85	6.27	....	6.13	5.95	5.90
31	7.09	....	h5.96	5.80	5.94	6.29	6.29	6.15	....	5.95	5.95	5.95

h Tape measurement.

139-45-1ccd2. City of Hawley. Drilled unused water-table well in glacial drift, diameter 10 inches, depth 122 feet. Highest water level 13.26 below lsd, Apr. 8, 1951; lowest 18.48 below lsd, July 22, 23, 1950. Records available: 1949-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.59	16.95	16.65	15.69	15.34	15.68	16.05	16.8	16.58	16.85	16.54	16.51
2	16.89	16.98	16.74	16.03	15.46	15.41	16.58	16.74	16.08	16.73	16.46	16.06
3	16.85	17.02	16.56	16.11	15.49	15.09	16.04	16.70	16.12	16.96	16.67	16.36
4	16.89	16.78	16.43	15.63	15.58	15.43	15.73	16.73	16.61	16.88	16.29	16.04
5	16.77	16.93	16.72	14.99	15.51	15.48	16.40	16.23	16.60	16.82	16.74	16.19
6	16.83	....	16.67	14.22	15.46	15.64	16.23	17.11	16.49	16.58	....	15.95
7	16.53	16.91	16.78	14.18	15.77	15.95	16.20	16.65	16.63	16.11	....	16.21
8	16.91	17.05	16.89	13.81	15.79	15.91	15.93	17.03	16.52	17.05	....	16.15
9	16.73	17.04	16.88	14.08	15.84	15.62	16.35	16.47	16.23	16.60	....	15.61
10	16.79	17.03	16.60	14.23	15.90	15.37	16.31	17.13	16.67	16.88	....	16.21
11	16.73	16.82	16.31	14.44	15.79	15.82	16.96	16.8	16.68	16.69	....	15.96
12	16.79	17.07	17.04	14.31	15.93	16.54	16.65	16.43	16.71	16.75	....	16.00
13	16.85	16.91	16.73	14.43	15.67	16.67	16.62	17.07	16.89	16.57	....	16.11
14	16.57	17.07	17.09	14.41	16.01	16.70	16.57	16.83	16.75	16.12	h16.15	16.21
15	16.94	16.95	16.62	14.00	15.99	16.56	16.28	17.01	16.75	16.62	16.53	16.23
16	16.76	17.15	17.21	14.43	16.06	16.14	16.73	16.61	16.41	16.32	16.44	....
17	16.96	17.06	16.70	14.35	16.08	15.78	16.68	16.65	16.69	16.55	16.23	....
18	16.83	16.57	16.33	14.43	15.91	16.22	16.71	16.90	16.59	16.60	15.88	h16.03
19	16.99	16.90	16.63	14.88	15.86	16.06	16.62	16.40	16.98	16.61	16.38	16.31
20	16.87	16.79	16.60	14.58	15.62	16.11	16.67	16.91	16.67	16.58	16.28	16.19
21	16.65	17.00	16.99	14.59	15.96	16.04	16.82	17.03	16.62	16.12	16.47	16.41
22	17.03	17.34	16.8	14.19	16.00	16.16	16.42	16.91	17.01	16.68	15.93	16.50
23	16.86	16.99	16.65	14.8	16.06	16.25	17.02	17.07	16.68	16.41	16.29	16.07
24	16.99	16.93	16.92	....	15.98	15.91	16.87	16.8	17.14	16.40	16.50	16.54
25	17.01	16.48	16.30	14.84	15.79	16.31	16.8	16.69	17.17	16.49	15.99	16.12

## 139-45-1cccd2--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	17.10	16.98	16.65	15.12	15.85	16.18	16.75	16.43	16.87	16.59	16.44	16.43
27	16.86	16.55	16.43	15.10	15.57	16.41	16.67	16.66	16.62	16.42	16.32	16.38
28	16.62	16.77	16.33	15.28	16.12	16.17	16.64	16.48	16.64	16.24	16.42	16.61
29	16.89		15.95	14.9	15.96	16.24	16.24	16.51	16.75	16.60	16.43	16.59
30	16.86		15.92	15.48	15.82	16.33	16.89	16.45	16.21	16.39	16.42	16.11
31	16.99		15.91		16.06		17.19	16.29		16.56		16.62

h Tape measurement.

139-47-5cdc. Formerly 139-47-5cc3, city test hole MS-1. City of Moorhead. Drilled test and observation water-table well in glacial sand and gravel, diameter 8 inches, depth 131 feet, casing slotted 91-107. Highest water level 12.19 below lsd, July 15, 1947; lowest 22.89 below lsd, July 27, 1951. Records available: 1947-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	.....	21.90	22.32	.....	22.87	22.45	22.65	.....	22.55
2	.....	h22.62	.....	21.98	21.94	22.26	.....	22.81	22.34	22.78	h22.41	22.40
3	.....	.....	.....	22.04	21.96	22.20	.....	22.80	22.35	22.79	.....	22.51
4	.....	.....	h22.25	22.02	22.00	22.20	.....	22.76	22.37	22.66	.....	22.49
5	.....	.....	.....	21.99	22.00	22.24	.....	22.70	22.54	22.69	.....	22.56
6	h22.40	.....	.....	21.97	21.95	22.22	h22.35	22.66	22.57	22.59	h22.39	22.44
7	.....	.....	.....	21.9	22.09	22.21	.....	22.73	22.62	22.51	22.65	22.58
8	.....	.....	.....	21.9	22.18	22.29	.....	22.73	22.60	22.52	22.53	22.51
9	.....	.....	h22.00	.....	22.20	22.40	.....	22.70	22.51	22.64	22.56	22.48
10	.....	h22.50	.....	.....	22.01	22.26	.....	22.70	22.56	22.57	22.53	22.46
11	.....	.....	.....	.....	h22.31	22.23	.....	22.66	22.66	22.58	22.46	22.56
12	.....	.....	.....	.....	22.31	.....	.....	22.62	22.59	22.58	22.51	22.53
13	h22.23	.....	.....	h21.86	.....	22.41	h22.75	22.57	22.63	22.68	22.59	22.57
14	.....	.....	.....	21.96	.....	22.51	.....	22.54	22.66	22.63	22.57	22.56
15	.....	.....	.....	21.87	.....	22.50	.....	22.65	22.71	22.65	22.64	22.58
16	.....	h22.45	h22.00	21.90	.....	22.50	.....	22.53	22.63	22.64	22.53	22.48
17	.....	.....	.....	21.88	.....	.....	22.70	22.56	22.65	22.65	22.58	22.57
18	.....	.....	.....	21.91	h22.17	.....	22.71	22.56	22.72	22.61	22.44	22.55
19	h21.80	.....	.....	21.90	22.38	.....	22.71	22.51	22.77	22.55	22.53	22.58
20	.....	.....	.....	21.86	22.42	.....	22.68	22.55	22.69	22.43	22.49	22.54
21	.....	.....	.....	21.79	22.28	.....	22.73	22.62	22.65	22.46	22.61	.....
22	.....	.....	.....	21.82	22.51	22.39	.....	22.54	22.71	22.50	22.46	h22.36
23	.....	h22.14	.....	21.83	22.55	22.43	.....	22.55	22.70	22.62	22.56	22.56
24	.....	.....	h21.80	21.82	22.64	22.40	.....	22.59	22.63	22.61	22.43	22.52
25	.....	.....	.....	21.83	22.63	.....	.....	22.63	22.68	22.69	22.49	22.51
26	.....	.....	.....	21.84	22.63	22.36	.....	22.46	22.64	22.71	22.46	22.57
27	h22.20	.....	.....	21.80	22.63	22.35	h22.89	22.63	22.68	22.70	22.57	22.59
28	.....	.....	.....	21.86	22.63	.....	22.78	22.63	22.60	22.60	22.52	22.60
29	.....	.....	.....	21.78	22.71	h22.35	22.73	22.58	22.74	22.66	22.54	22.65
30	.....	.....	.....	21.80	22.72	.....	22.79	22.49	22.74	.....	22.50	22.52
31	.....	h21.86	.....	22.38	.....	22.88	22.55	.....	.....	.....	.....	22.61

h Tape measurement.

139-47-6aaa. U. S. Geol. Survey. Drilled test and observation water-table well in glacial gravel, diameter 3 inches, depth 103 feet, casing slotted near bottom of well. Highest water level 16.94 below lsd, July 16, 1949; lowest 21.57 below lsd, Sept. 21, 1951. Records available: 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	19.40	Apr. 13	20.12	July 13	20.41	Oct. 5	20.82
13	19.34	21	20.10	20	20.39	12	20.90
19	19.34	27	20.05	27	20.05	19	20.85
27	19.32	May 4	20.09	Aug. 3	19.94	26	20.88
Feb. 2	20.25	11	20.10	10	20.01	Nov. 2	20.60
10	20.20	18	19.97	14	20.64	9	20.89
16	20.20	25	19.99	17	20.68	16	20.91
23	19.94	June 1	20.00	24	21.50	23	20.89
Mar. 4	20.13	8	20.05	31	20.73	30	20.94
9	20.00	16	20.10	Sept. 7	20.73	Dec. 7	21.00
16	19.97	22	20.15	14	20.17	14	20.96
24	19.95	29	20.44	21	21.57	22	21.02
31	20.10	July 6	20.17	28	20.79	28	21.05
Apr. 6	20.12						

139-48-4dcc1. Formerly 139-48-7dcc1, city supply well 4(M18). City of Moorhead. Drilled unused artesian well in glacial sand, diameter 20 inches, depth 242 feet. Highest water level 166.40 below lsd, Dec. 3, 1951; lowest 187.50 below lsd, Aug. 29, 1948. Records available: 1947-51.

Daily lowest water level from recorder graph\*

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	168.28	168.10	167.60	168.54	167.61
2	.....	.....	168.21	167.86	167.50	168.45	167.07
3	.....	.....	168.65	168.08	167.84	168.04	167.12
4	.....	.....	168.21	167.79	168.10	167.86	167.31
5	.....	.....	168.03	167.89	168.73	168.40	167.34
6	.....	.....	168.18	167.97	168.43	168.22	166.99
7	.....	.....	168.02	168.13	168.52	168.14	168.00
8	.....	.....	167.98	168.06	168.28	167.93	167.95
9	.....	.....	168.28	167.67	168.17	167.92	168.06
10	.....	.....	168.17	167.42	168.06	167.95	167.81
11	.....	.....	168.50	167.55	167.85	167.65	167.69
12	.....	.....	168.14	167.58	167.72	166.98	167.71
13	.....	.....	168.36	167.80	167.72	167.30	168.08
14	.....	.....	168.01	167.98	167.62	167.25	h167.91
15	.....	.....	168.21	168.36	167.46	168.10	.....
16	h167.76	.....	168.03	167.88	168.02	168.79	.....
17	168.1	.....	168.15	168.21	168.42	168.71	.....
18	168.5	.....	167.85	168.16	168.34	168.49	.....
19	167.9	.....	167.99	167.86	168.08	168.28	.....
20	167.9	.....	167.79	167.87	167.51	168.12	.....
21	167.9	.....	168.24	168.17	167.92	168.04	.....
22	167.8	.....	167.98	167.90	167.96	168.22	h168.61
23	.....	.....	167.96	168.14	168.21	168.44	.....
24	.....	.....	167.99	168.12	168.15	168.06	.....
25	.....	.....	167.88	168.06	168.26	168.13	.....
26	.....	.....	167.65	167.69	168.35	168.07	.....
27	.....	h168.47	167.85	168.42	168.29	167.89	.....
28	.....	.....	168.25	167.59	168.18	167.82	167.89
29	.....	.....	168.31	167.72	167.75	167.99	167.90
30	.....	.....	168.64	167.67	168.07	168.10	167.59
31	.....	.....	168.48	168.13	168.43	.....	.....

h Tape measurement.

\* No record for January, February, March, April, and May.

Hennepin County

B29-24-23cdal. American Bag Co. Formerly North Star Woolen Mill Co. 109 Portland Ave., Minneapolis. Drilled unused artesian well in St. Peter sandstone, diameter 4 inches, depth 226 feet, reported to be cased to 162. Highest water level 24.2 below lsd, Jan. 11, 1932; lowest 63.0 below lsd, Aug. 13, 1949. Records available: 1931-32, 1940-41, 1943-46, 1948-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Dec. 31, 1931	28.4	Jan. 17, 1932	26.3	Feb. 3, 1932	24.5	Jan. 19, 1940	41.1
Jan. 1, 1932	27.6	18	26.2	4	24.6	July 24	48.2
2	26.6	19	27.2	5	24.6	Jan. 10, 1941	38.5
3	26.8	20	25.6	6	24.8	Feb. 24	39.5
4	26.2	21	25.4	7	24.8	Aug. 19	46.8
5	25.7	22	25.5	8	24.5	Aug. 13, 1943	53.0
6	25.7	23	25.2	9	24.7	Sept. 1, 1944	48.5
7	26.2	24	26.9	10	24.8	Mar. 28, 1945	47.5
8	27.5	25	26.3	11	24.8	Sept. 14	50.9
9	27.4	26	26.8	Apr. 2	25.5	Mar. 29, 1946	45.9
10	24.8	27	27.1	3	25.5	Sept. 3	48.6
11	24.2	28	25.1	4	24.9	Feb. 23, 1948	45.6
12	24.6	29	25.1	9	26.0	Sept. 13	56.6
13	27.1	30	25.9	10	25.7	Mar. 14, 1949	47.2
14	26.0	31	25.3	11	25.1	Aug. 13	63.0
15	27.1	Feb. 1	24.5	23	26.7	Apr. 10, 1950	48.8
16	27.4	2	24.3	May 7	26.7	Nov. 14	52.8

B29-24-23cda1--Continued.

Day	Daily lowest water level from recorder graph, 1951											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	.....	50.80	54.09	57.03	.....	59.35	54.34	52.44	49.45
2	.....	.....	h49.13	.....	51.01	54.09	.....	.....	59.35	54.52	52.42	49.45
3	h48.27	.....	.....	.....	51.20	54.08	.....	.....	58.49	54.73	52.37	49.27
4	.....	.....	.....	.....	51.32	54.12	56.85	.....	57.36	54.86	51.04	49.38
5	.....	.....	.....	.....	51.39	54.11	56.70	.....	57.05	54.93	51.26	49.49
6	.....	.....	.....	.....	51.41	54.07	56.70	.....	57.14	54.97	50.94	49.62
7	.....	.....	.....	.....	51.45	54.07	56.77	.....	57.17	54.97	50.84	49.75
8	.....	.....	.....	.....	51.56	54.19	56.77	h59.91	57.17	54.68	50.80	49.79
9	.....	.....	h49.18	.....	51.66	54.32	56.89	60.05	57.18	54.55	50.80	49.79
10	.....	.....	.....	.....	51.66	54.32	57.00	60.17	56.55	54.60	50.80	49.58
11	.....	.....	.....	h49.74	51.74	54.40	57.09	60.19	56.55	54.71	50.79	49.60
12	.....	.....	.....	49.77	51.81	54.57	57.21	60.19	56.62	54.80	50.35	49.70
13	.....	.....	.....	49.84	51.82	54.77	57.36	59.50	56.66	54.88	.....	49.79
14	.....	.....	.....	49.91	51.93	55.00	57.46	59.54	56.66	54.88	.....	49.74
15	.....	.....	.....	49.95	52.14	55.24	57.47	59.49	56.66	54.67	.....	49.74
16	.....	.....	h49.34	50.00	52.34	55.42	57.63	59.46	56.58	54.68	50.41	.....
17	.....	.....	.....	50.11	52.51	55.49	57.69	59.28	55.76	54.71	50.41	.....
18	.....	.....	.....	50.17	52.66	55.69	57.95	59.26	55.57	54.74	50.40	h49.41
19	.....	.....	.....	50.25	52.81	55.90	58.10	.....	55.72	54.74	50.14	49.52
20	.....	.....	h49.02	.....	52.86	56.10	58.24	h58.79	55.91	54.73	50.07	49.54
21	.....	.....	.....	.....	52.99	56.31	58.31	58.87	55.95	54.46	h50.06	49.55
22	.....	.....	.....	.....	53.10	56.47	58.30	58.90	55.95	53.74	.....	49.55
23	.....	.....	h49.45	.....	53.21	56.57	58.36	58.93	55.87	53.51	.....	49.49
24	.....	.....	h49.10	.....	53.43	56.58	58.51	59.01	55.16	53.49	.....	49.05
25	.....	.....	h50.23	.....	53.62	56.63	58.69	59.04	54.92	53.49	.....	48.64
26	.....	.....	.....	50.30	53.71	56.73	58.87	59.04	54.87	53.51	h49.02	48.07
27	.....	.....	.....	50.33	53.74	56.82	59.04	58.77	54.87	53.49	49.09	47.99
28	.....	.....	.....	50.44	53.82	56.89	59.13	58.80	54.88	53.30	49.20	48.05
29	.....	.....	.....	50.44	53.98	56.98	59.16	58.98	54.88	52.67	49.34	48.06
30	.....	.....	h49.46	50.57	54.01	57.03	59.27	59.26	54.84	52.46	49.41	48.06
31	.....	.....	.....	.....	54.06	.....	59.34	.....	52.44	.....	47.87	.....

h Tape measurement.

Itasca County

146-27-25cac. Formerly 146-27-26bd. Corps of Engineers, U. S. Army. Driven observation water-table well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 30 feet. Water level influenced by impounded Lake Winnibigoshish. Highest water level 16.33 below lsd, Aug. 7, 1950; lowest 24.00 below lsd, Feb. 5, 1949. Records available: 1943-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	19.68	Apr. 2	20.88	July 1	19.28	Oct. 22	20.08
8	20.48	9	20.73	9	19.32	29	19.90
12	19.93	16	20.76	16	19.51	Nov. 5	19.87
21	20.04	23	20.78	23	19.58	11	19.85
30	20.00	30	20.46	30	19.71	13	19.77
Feb. 5	20.04	May 8	20.50	Aug. 6	19.74	18	20.13
12	20.13	14	20.36	20	19.93	26	19.93
19	20.24	21	20.18	27	19.94	Dec. 3	20.05
26	20.21	28	19.80	Sept. 17	19.98	10	20.18
Mar. 4	20.50	June 4	19.70	24	19.98	18	20.04
12	20.36	11	19.35	Oct. 2	19.93	24	20.08
19	20.42	18	19.35	8	20.10	31	20.07
26	20.48	25	19.21	15	19.99	.....	.....

Morrison County

130-29-8dcc. Formerly R-16. U. S. Geol. Survey. Drilled test and observation water-table well in glacial gravel, diameter 2 inches, depth 59 feet, screen 56-59. Highest water level 9.94 below lsd, Dec. 6, 1951; lowest 13.70 below lsd, Nov. 29, 1949. Records available: 1949-51.

## 130-29-8dcc--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 12	12.79	Aug. 30	11.48	Oct. 11	10.22	Nov. 23	10.10
19	11.60	Sept. 6	10.88	18	10.26	30	9.95
26	11.40	13	10.29	25	10.26	Dec. 6	9.94
Aug. 2	11.63	20	10.21	Nov. 1	10.26	13	10.01
9	11.68	27	10.14	8	10.12	20	10.23
16	11.03	Oct. 4	10.15	15	10.14	27	10.21
23	11.42						

St. Louis County

B56-17-4b. Formerly 56-17-4. Herman A. Katola. Dug domestic water-table well in glacial sand and gravel, diameter 16 inches, depth 10 feet. Highest water level 2.73 below lsd, May 10, 1944; lowest 9.25 below lsd, Feb. 27, Mar. 6, 1949. Records available: 1943-51.

Jan. 7	7.00	Feb. 18	7.45	Apr. 1	3.12	May 13	4.54
14	7.08	25	7.46	8	4.18	20	5.11
21	7.13	Mar. 4	7.12	15	5.92	27	5.29
27	7.24	11	7.09	22	3.92	June 3	5.26
Feb. 4	7.30	18	7.16	29	4.00	10	5.54
	7.35	25	6.15	May 6	4.37		

## MISSOURI

By J. B. Cooper

### Scope of Water-Level Program

Water-level measurements were made in Atchison County in 1951 as part of the Tarkio Creek Valley observation-well program. The Tarkio Creek Valley area also includes parts of Montgomery and Page Counties, Iowa. The measurements of the Atchison County wells have been made in conjunction with the Iowa observation-well program. Records of the water levels in wells in the Iowa part of the area are given in the Iowa section of this report. Measurements were made in 13 wells in Atchison County in 1951. Measurements were continued in 1951 in the well at Trenton, Grundy County. Measurements have been made in this well at approximately weekly intervals since November 1942.

### Interpretation of Water-Level Fluctuations

In the Grundy County well, the low measurement of 8.96 feet below land-surface datum, recorded on February 11, is the lowest on record. The maximum fluctuation of water level was 6.76 feet, with the highest reading of 2.20 feet occurring on July 15. The water level was 3.80 feet higher at the end of 1951 than at the end of 1950.

### Well-Numbering System

The numbers assigned to the observation wells in Atchison and Grundy Counties, Missouri, show the location of the well according to the rectangular system for subdivision of public land. The system used is explained fully in the Iowa section of this report.

### Well Descriptions and Water-Level Measurements

(Water levels are in feet below land-surface datum unless otherwise indicated.)

#### Atchison County

##### Tarkio Creek Valley

66-40-1n1. H. W. Klutas. Drilled unused water-table well in glacial drift, diameter 12 inches, depth 21 feet, lined with tile. Highest water level 4.60, Oct. 27, 1941; lowest 14.47, Sept. 19, 1934. Records available: 1934-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	9.80	Apr. 20	8.74	July 18	9.03	Oct. 25	9.12
Feb. 21	10.13	May 29	8.07	Aug. 27	8.40	Nov. 27	9.43
Mar. 19	9.59	June 25	7.62	Sept. 26	8.80	Dec. 26	9.60

66-40-12N1. Edwin Rolf. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 24 feet. Highest water level 5.32, Oct. 27, 1941; lowest 16.76, Aug. 28, 1950. Records available: 1937-48, 1950-51.

Jan. 22	13.68	Apr. 20	10.04	June 25	11.87	Nov. 27	12.32
Feb. 21	13.30	May 29	8.10	July 18	6.60	Dec. 26	12.75
Mar. 19	12.60						

66-40-13A1. George Rolf. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 37 feet. Highest water level 15.96, July 18, 1951; lowest 33.00, Sept. 25, 1940. Records available: 1937-51.

Jan. 22	27.36	Apr. 20	23.10	July 18	15.96	Oct. 25	19.09
Feb. 21	28.25	May 29	17.70	Aug. 27	17.84	Nov. 27	21.48
Mar. 19	26.45	June 25	17.74	Sept. 26	18.50	Dec. 26	19.20

66-40-13B1. W. R. Marshall. Drilled unused water-table well in glacial drift, diameter 12 inches, depth 29 feet, lined with tile. Highest water level 1.19, Sept. 26, 1951; lowest 18.13, Feb. 13, 1939. Records available: 1934-48, 1950-51.

## 66-40-13B1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	9.48	Apr. 20	6.80	July 18	6.07	Nov. 27	4.10
Feb. 21	10.59	May 29	6.66	Aug. 27	5.00	Dec. 26	3.15
Mar. 19	7.78	June 25	5.84	Sept. 26	1.19		

66-40-13B2. W. F. Marshall. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 22 feet. Highest water level 0.51, Aug. 27, 1951; lowest 14.59, Dec. 18, 1939. Records available: 1937-51.

Jan. 22	4.80	Apr. 20	3.37	July 18	1.68	Oct. 25	3.05
Feb. 21	5.55	May 29	2.12	Aug. 27	.51	Nov. 27	7.76
Mar. 19	4.05	June 25	1.10	Sept. 26	8.00	Dec. 26	4.55

66-40-13B3. W. F. Marshall. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 28 feet. Highest water level 7.44, May 26, 1945; lowest 24.56, Jan. 25, 1944. Records available: 1937-51.

Jan. 22	21.28	Apr. 20	13.65	July 18	8.78	Oct. 25	15.82
Feb. 21	21.33	May 29	8.10	Aug. 27	12.20	Nov. 27	17.85
Mar. 19	17.00	June 25	7.56	Sept. 26	13.35	Dec. 26	12.90

66-40-13C1. W. F. Marshall. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 19 feet. Highest water level 3.79, June 23, 1947; lowest 17.74, Dec. 18, 1939. Records available: 1937-51.

Jan. 22	8.32	Apr. 20	10.37	July 18	5.94	Oct. 25	10.55
Feb. 21	16.96	May 29	8.74	Aug. 27	6.02	Nov. 27	6.00
Mar. 19	11.60	June 25	6.16	Sept. 26	8.00	Dec. 26	13.20

66-40-13C2. W. F. Marshall. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 27 feet. Highest water level 9.47, June 23, 1947; lowest 18.68, Mar. 27, 1941. Records available: 1937-51.

Jan. 22	17.00	Apr. 20	13.75	July 18	11.77	Oct. 25	15.07
Feb. 21	16.29	May 29	12.88	Aug. 27	10.18	Nov. 27	15.59
Mar. 19	14.36	June 25	11.54	Sept. 26	14.05	Dec. 26	10.34

66-40-13D1. W. F. Marshall. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 16 feet. Highest water level 1.26, Mar. 26, 1946; lowest 12.58, Jan. 30, 1941. Records available: 1937-51.

Jan. 22	4.52	Apr. 20	3.10	July 18	2.74	Oct. 25	2.60
Feb. 21	4.92	May 29	2.77	Aug. 27	3.48	Nov. 27	2.60
Mar. 19	3.27	June 25	2.65	Sept. 26	2.76	Dec. 26	3.10

66-40-26R1. J. A. McAllister. Formerly U. S. Geol. Survey. Drilled observation water-table well in glacial drift, diameter 1 $\frac{1}{4}$  inches, depth 17 feet. Highest water level 0.10, June 23, 1947; lowest 11.76, Jan. 30, 1939. Records available: 1937-51.

Jan. 22	3.57	Apr. 20	5.00	July 18	4.24	Nov. 27	3.73
Feb. 22	5.00	May 29	5.70	Aug. 27	3.48	Dec. 26	3.83
Mar. 19	5.26	June 25	4.45	Sept. 26	3.66		

66-40-35H1. J. A. McAllister. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 17 feet. Highest water level 4.29, May 28, 1942; lowest 15.77, Dec. 18, 1939. Records available: 1937-51.

Jan. 22	8.53	Apr. 20	10.20	July 18	6.75	Oct. 25	9.19
Feb. 22	11.75	May 29	8.00	Aug. 27	5.34	Nov. 27	10.16
Mar. 19	10.70	June 25	7.06	Sept. 26	9.00	Dec. 26	9.96

65-40-10R1. U. S. Geol. Survey. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 30 feet. Highest water level 8.77, June 23, 1947; lowest 27.94, Dec. 18, 1939. Records available: 1937-51.

Jan. 22	19.67	May 29	17.30	Aug. 27	15.35	Oct. 25	16.25
Feb. 22	20.72	June 25	14.66	Sept. 26	17.09	Nov. 27	18.86
Apr. 20	20.16	July 18	13.15				

65-40-11E1. U. S. Geol. Survey. Drilled observation water-table well in glacial drift, diameter 3 inches, depth 32 feet. Highest water level 8.67, June 23, 1947; lowest dry May 2, 1938, Apr. 24, 1941, winter 1939. Records available: 1937-51.

Jan. 22	21.72	Apr. 20	20.02	July 18	11.96	Oct. 25	17.56
Feb. 22	22.48	May 29	14.29	Aug. 27	10.00	Nov. 27	16.03
Mar. 19	22.46	June 25	14.30	Sept. 26	15.70	Dec. 26	10.80

Grundy County

61-24-17R1. W. W. Brummitt. 105 East Fourth St., Trenton. Dug unused water-table well in glacial drift, diameter 3 feet, depth 21 feet, cribbed with rock. Highest water level 0.03, June 21, 1947; lowest 8.96, Feb. 11, 1951. Records available: 1942-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan.	8.24	May	5.45	July	3.00	Oct.	6.20
	8.04		5.10		3.60		6.00
	8.26		5.20		3.85		5.20
	8.30		5.50		4.40		5.20
Feb.	8.32	June	5.60	Aug.	4.20	Nov.	4.40
	8.96		5.55		4.15		4.17
	8.90		5.80		4.30		4.24
Mar.	6.01	July	4.20	Sept.	5.10	Dec.	4.32
	6.04		2.90		6.00		4.46
	5.50		2.30		6.10		4.60
Apr.	5.35	15	2.20	Oct.	6.00	30	4.80
	5.40						

Phelps County

37-10-13K1. S. V. Allen. In Jerome. Drilled unused observation well in Gasconade dolomite, diameter 6 inches, depth 34 feet, galvanized iron casing. Highest water level 4.38, Apr. 2, 1945; lowest 9.65, Jan. 1, 1945. Records available: 1942-51.

Jan. 2	8.45	Apr. 2	7.01	June 29	5.96	Oct. 1	6.75
31	7.88	30	7.02	July 31	6.93	31	6.79
Feb. 28	6.64	May 31	7.18	Aug. 31	6.86	Nov. 30	6.60

37-10-24A1. Fred Pillman. In Arlington. Dug and driven unused observation well in Gasconade dolomite, diameter 6 inches, depth 15 feet, galvanized iron casing. Highest water level 4.16, Apr. 2, 1945; lowest dry on many dates. Records available: 1942-51.

Jan. 2	11.29	Apr. 2	7.73	June 29	4.19	Oct. 1	7.97
21	12.47	30	5.88	July 31	6.93	31	7.10
Feb. 28	8.25	May 31	7.77	Aug. 31	7.16	Nov. 30	5.77

## NEBRASKA

By C. F. Keech

### Scope of Water-Level Program

The observation-well program in Nebraska, begun in 1934 in cooperation with the Conservation and Survey Division, University of Nebraska was continued in 1951. Many of the well records in this report have been compiled as a part of the Missouri Basin Development program. As a result of this participation, the number of measurements made are the number of wells in which water-level measurements are obtained has been increased. Wells in which water-level measurements have been made and are not listed in this report, but which have been published in previous water-level reports, are kept in open file pending publication in other forms. Measurements of water levels made in 411 wells are included in this report. A map showing the location of the observation wells is shown in figure 12. The following organizations cooperated informally: Fish and Wildlife Service in Garden County; Central Nebraska Public Power and Irrigation District in Lincoln County; Platte Valley Public Power and Irrigation District in Keith County, and State Department of Roads and Irrigation in Morrill County.

### Precipitation

The average annual precipitation in Nebraska in 1951 was 30.40 inches, 7.64 inches above normal and 8.19 inches above that of 1950.

### Pumpage

The following tables give the total pumpage for the public supplies of Lincoln and Grand Island. The Lincoln public supply is pumped from 12 wells in the flood plain of the Platte River, about 3 miles north of Ashland. Pumping began in August 1932, and by the end of 1951, a total of approximately 63,820 million gallons had been withdrawn from the ground-water reservoir. The public supply at Grand Island is pumped from a group of wells in the Platte River valley in sands and gravels of Pleistocene age.

**Monthly pumpage, in millions of gallons, for the public supply of Lincoln**

	1932	1933	1934	1935	1936	1937	1938
Jan.	.....	204.2	136.6	181.1	186.2	203.8	208.7
Feb.	.....	187.0	164.2	167.2	193.0	190.7	192.2
Mar.	.....	205.0	188.5	199.2	204.4	200.6	211.1
Apr.	.....	210.0	194.8	193.6	188.8	158.5	189.5
May	.....	213.8	236.0	188.7	234.8	262.9	216.4
June	.....	263.6	249.9	192.0	296.4	254.5	245.8
July	.....	212.6	308.9	236.9	334.5	322.5	304.9
Aug.	98.5	197.2	278.1	255.8	319.8	317.7	298.9
Sept.	186.1	169.4	206.5	181.3	228.2	297.6	201.6
Oct.	204.9	132.6	176.9	154.0	236.4	204.8	207.2
Nov.	201.8	106.4	196.6	90.1	209.2	217.1	116.3
Dec.	203.2	133.9	171.7	182.9	201.2	188.8	141.1
	894.5	2,235.7	2,508.7	2,222.8	2,832.9	2,819.5	2,533.7

	1939	1940	1941	1942	1943	1944	1945
Jan.	196.1	195.8	193.4	198.5	248.2	281.4	310.1
Feb.	185.6	182.8	181.2	178.4	227.6	246.1	283.9
Mar.	212.9	193.9	195.1	199.3	253.5	274.0	317.7
Apr.	223.7	177.1	173.8	213.8	246.9	274.3	313.3
May	284.6	246.5	280.2	243.4	290.0	297.2	319.6
June	267.4	290.7	286.3	292.4	324.6	353.1	312.1
July	325.0	374.3	387.4	372.5	379.8	381.0	365.6
Aug.	300.6	290.7	377.8	399.8	377.1	361.0	361.0
Sept.	324.3	314.1	277.0	269.3	334.0	343.3	334.7
Oct.	232.7	264.4	201.2	234.1	304.8	327.1	324.0
Nov.	222.8	170.8	197.7	200.5	237.4	291.4	311.5
Dec.	203.4	201.5	205.3	241.8	263.9	307.5	291.9
	2,979.1	2,902.6	2,965.4	3,043.8	3,487.8	3,737.4	3,845.4

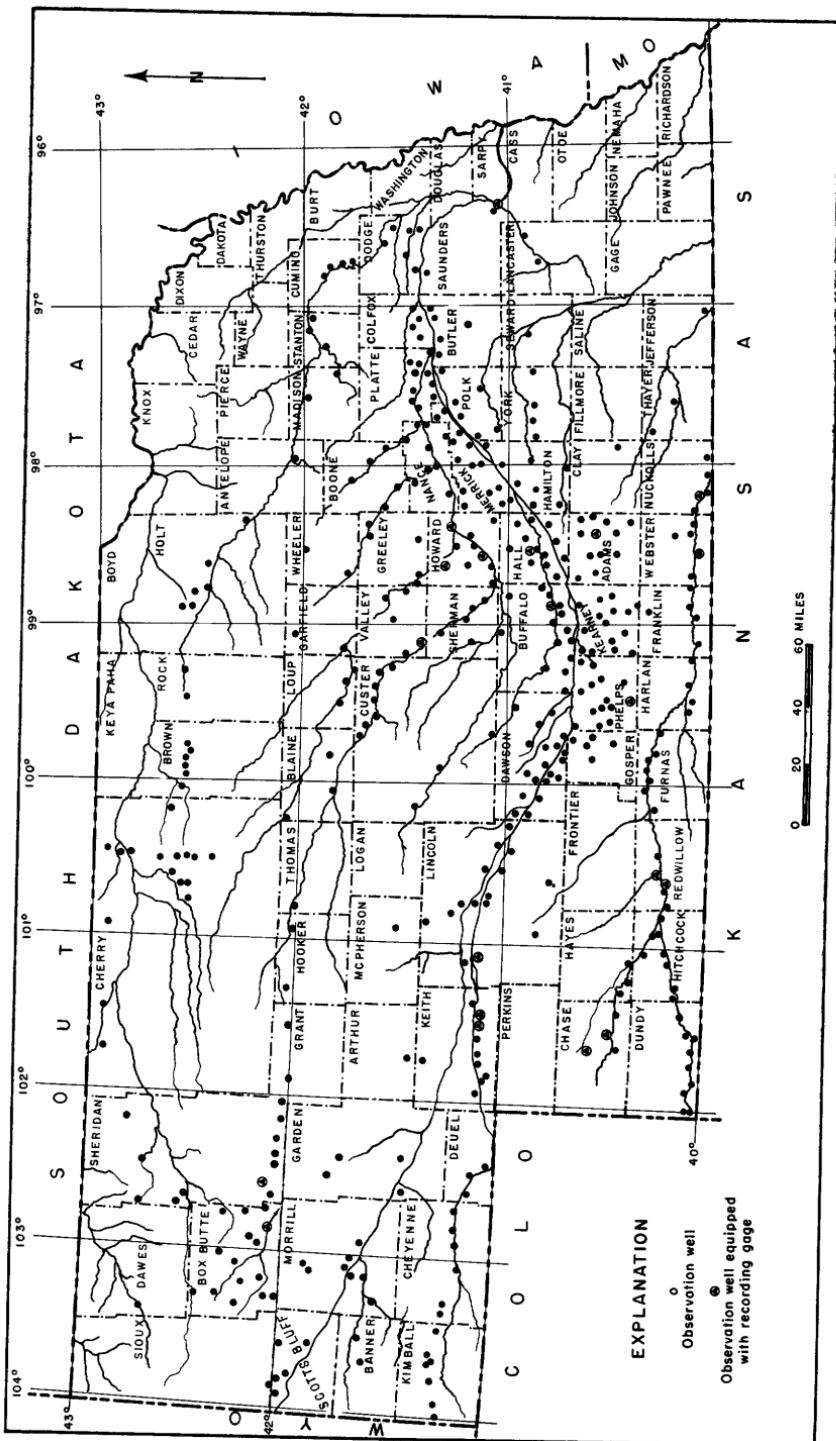


Figure 12. --Location of observation wells in Nebraska, 1951.

	1946	1947	1948	1949	1950	1951
Jan.	286.9	329.1	333.3	362.0	341.7	343.5
Feb.	259.6	299.0	309.6	325.7	311.5	280.2
Mar.	288.3	333.8	334.8	355.8	340.5	346.6
Apr.	330.7	325.5	213.7	361.1	339.4	320.6
May	327.2	335.0	356.7	381.3	369.7	336.2
June	353.0	326.7	349.4	374.2	391.8	363.2
July	374.2	375.4	407.2	412.9	403.7	396.2
Aug.	340.0	399.5	409.3	416.3	398.6	398.8
Sept.	341.8	380.2	392.1	398.0	394.1	378.3
Oct.	341.3	364.7	392.8	344.2	400.9	373.7
Nov.	312.8	313.8	361.1	355.5	333.9	303.0
Dec.	312.5	325.8	363.0	351.4	a194.1	b112.4
	3,868.3	4,108.5	4,223.0	4,438.4	4,219.9	3,952.7

a Plant shut down one week.

b Plant shut down from Nov. 26 to Dec. 20.

Average daily pumpage, in millions of gallons, for public supply of Lincoln

	1932	1937	1942	1947	1948	1949	1950	1951
1932	5.84	7.72	8.34	1947			11.25	
1933	6.12	6.94	9.53	1948			11.54	
1934	6.87	8.16	10.20	1949			12.16	
1935	6.10	7.95	10.54	1950			11.56	
1936	7.76	8.11	10.60	1951			10.82	

Monthly pumpage, in millions of gallons, for public supply of Grand Island

	1936	1937	1938	1939	1940	1941	1942	1943
Jan.	133.8	93.0	98.9	107.4	125.7	100.6	126.0	156.6
Feb.	95.6	83.3	88.2	89.7	99.8	82.5	88.4	151.6
Mar.	111.8	96.7	112.5	108.5	100.9	108.1	132.5	177.0
Apr.	154.3	131.3	140.7	154.8	144.8	111.1	128.9	212.3
May	172.8	165.1	162.2	195.6	190.6	159.7	137.2	223.6
June	215.1	173.6	181.9	209.8	229.2	134.9	251.9	244.3
July	291.2	236.3	242.4	248.2	245.6	254.5	225.1	301.3
Aug.	241.0	239.3	189.8	251.1	240.6	251.3	250.4	299.6
Sept.	194.6	194.7	199.0	241.5	198.8	174.3	202.3	250.1
Oct.	153.6	163.0	191.4	192.2	172.8	148.4	198.4	235.2
Nov.	104.2	139.3	135.7	144.1	132.6	134.7	168.9	188.9
Dec.	104.4	101.6	112.2	131.6	118.4	131.1	161.3	189.4
	1,972.4	1,817.2	1,854.9	2,074.5	1,999.8	1,791.2	2,071.3	2,629.9

	1944	1945	1946	1947	1948	1949	1950	1951
Jan.	189.7	228.1	210.3	218.3	216.5	240.3	226.3	261.6
Feb.	178.3	209.3	196.5	195.5	190.3	224.0	213.3	216.6
Mar.	209.6	269.3	218.7	230.6	209.6	238.6	233.5	236.4
Apr.	196.1	205.9	258.0	251.9	252.7	238.9	263.6	232.0
May	224.9	213.4	247.7	298.2	273.8	246.3	273.8	268.4
June	228.7	225.0	304.4	238.5	278.2	261.4	357.8	290.0
July	275.2	289.5	342.4	322.5	345.8	385.2	316.9	387.4
Aug.	320.6	286.3	354.8	399.6	311.7	360.2	322.7	364.4
Sept.	234.8	271.8	250.6	314.2	317.0	280.8	313.4	277.7
Oct.	228.8	231.7	245.7	244.8	268.4	253.2	286.5	290.8
Nov.	227.0	215.6	211.5	206.5	216.4	222.9	240.8	266.2
Dec.	223.6	214.2	217.6	213.0	222.6	226.5	238.8	275.7
	2,737.3	2,860.1	3,058.2	3,133.6	3,103.0	3,178.3	3,287.4	3,367.2

Average daily pumpage, in millions of gallons, for public supply of Grand Island

	1918	1927	1946	1947	1948	1949	1950	1951
	*1.64		*2.12		1936	5.41	1944	7.50
1919	*1.53	1928	*2.51		1937	5.00	1945	7.84
1920	*1.44	1929	3.65		1938	5.08	1946	8.38
1921	*1.59	1930	3.52		1939	5.68	1947	8.58
1922	*1.76	1931	4.16		1940	5.47	1948	8.48
1923	*1.83	1932	4.11		1941	4.90	1949	8.71
1924	*2.04	1933	4.90		1942	5.67	1950	9.01
1925	*2.15	1934	5.72		1943	7.20	1951	9.22
1926	*2.29	1935	5.34					

\* The figures for 1918-28 do not include water pumped for condenser use at municipal electric plant.

### Interpretation of Water-Level Fluctuations

Ground-water supplies are drawn upon extensively for irrigation in the lower Platte River valley. More than 5,500 irrigation wells are in the area, the greatest concentrations of these being in Dawson, Buffalo, Hall, and Merrick Counties. Measurements were irregular from 1930 to 1945, were made monthly in 1946, and from 1947 to 1951 were made bimonthly. It was found that the most dependable information regarding net annual losses from or additions to storage in the ground-water reservoirs in the pumping areas and in their immediate vicinities can be obtained by comparing water-level measurements made each year in the late winter or spring before the start of irrigation. Hydrographs showing the weighted average fluctuations of the water level in observation wells in six segments of the lower Platte River valley are shown in figure 13. Each hydrograph starts at the zero point - this point representing the weighted average water level on January 1, 1946. The hydrographs represent the weighted average fluctuation of water levels in all observation wells in each segment of the lower Platte River valley. The total number of observation wells in each segment are shown at the left hand side of the graph. The hydrographs show that for the period 1946 through 1951, ground-water levels in the lower Platte River valley have been trending upward, suggesting that recharge to the ground-water reservoir has been greater than the withdrawals. The minimum rise in water levels occurred in Lincoln County where the average water level was 0.3 foot higher on December 31, 1951, than on January 1, 1946. The greatest rise occurred in Dawson County where the average water level was almost 2 feet higher on December 31, 1951, than on January 1, 1946.

### Well-Numbering System

Wells are numbered in accordance with the Bureau of Land Management system of land subdivision. The first digit of a well number indicates the township, the second the range, and the third the section in which the well is situated. Thus, the number A1-10-27adc indicates that the well is in the SW<sub>1</sub>SE<sub>1</sub>NE<sub>1</sub> sec. 27, T. 1 N., R. 10 E. The first lower-case letter denotes the quarter section (160-acre tract), the second the quarter-quarter section (40-acre tract), and the third the quarter-quarter-quarter section (10-acre tract). The letters are assigned in a counterclockwise direction, beginning in the northeast quarter. When there is more than one well in the smallest tract, numbers are added as suffixes.

The State has been divided into two principal divisions. The well numbers east of the sixth principal meridian are preceded by the capital letter A. Those west of the sixth principal meridian have no preceding letter.

### Well Descriptions and Water-Level Measurements

(Water levels are in feet below land-surface datum unless otherwise indicated. When some measurements in a table are above and others are below the plane of reference, appropriate signs are placed to indicate a change; readings that are between minus (-) signs are considered to be below the plane of reference; and those between plus (+) signs are considered as above the plane of reference. A plus or minus sign is placed immediately preceding the first entry in each column of each mixed table.)

#### Adams County

5-9-9dc. Dan McClarry. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 142 feet. Land-surface datum is 1,794.23 feet above msl. Highest water level 35.65 below lsd, May 26, 1949; lowest 37.70 below lsd, Aug. 20, 1947. Records available: 1947-51. Jan. 22, 37.32; Mar. 15, 37.43; May 25, 36.89; Aug. 23, 37.19; Oct. 24, 37.28.

5-11-10bc. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand and clay, diameter 1 inch, depth 21 feet. Land-surface datum is 1,872.23 feet above msl. Highest water level 8.65 below lsd, July 28, 1950; lowest 10.81 below lsd, Nov. 13, 1940. Records available: 1937-38, 1940-41, 1946-51. Jan. 22, 9.83; Mar. 15, 9.89; May 25, 8.78. Measurement discontinued.

6-9-4cb. J. P. Larson. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 145 feet. Land-surface datum is 1,891.85 feet above msl. Highest water level 102.63 below lsd, Jan. 22, 1951; lowest 103.40 below lsd, Nov. 17, 1947. Records available: 1947-51. Jan. 22, 102.63; Mar. 15, 102.77; May 25, 102.88; Oct. 24, 102.70.

6-10-23bb. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand and clay, diameter 1 inch, depth 18 feet. Land-surface datum is 1,815.27 feet above msl. Highest water level 2.05 below lsd, May 26, 1949; lowest 10.43 below lsd, Apr. 12, 1937. Records available: 1936-40, 1942, 1946-51. Jan. 22, 6.15; Mar. 15, 6.43; May 25, 5.26; Aug. 23, 5.31; Oct. 24, 5.56.

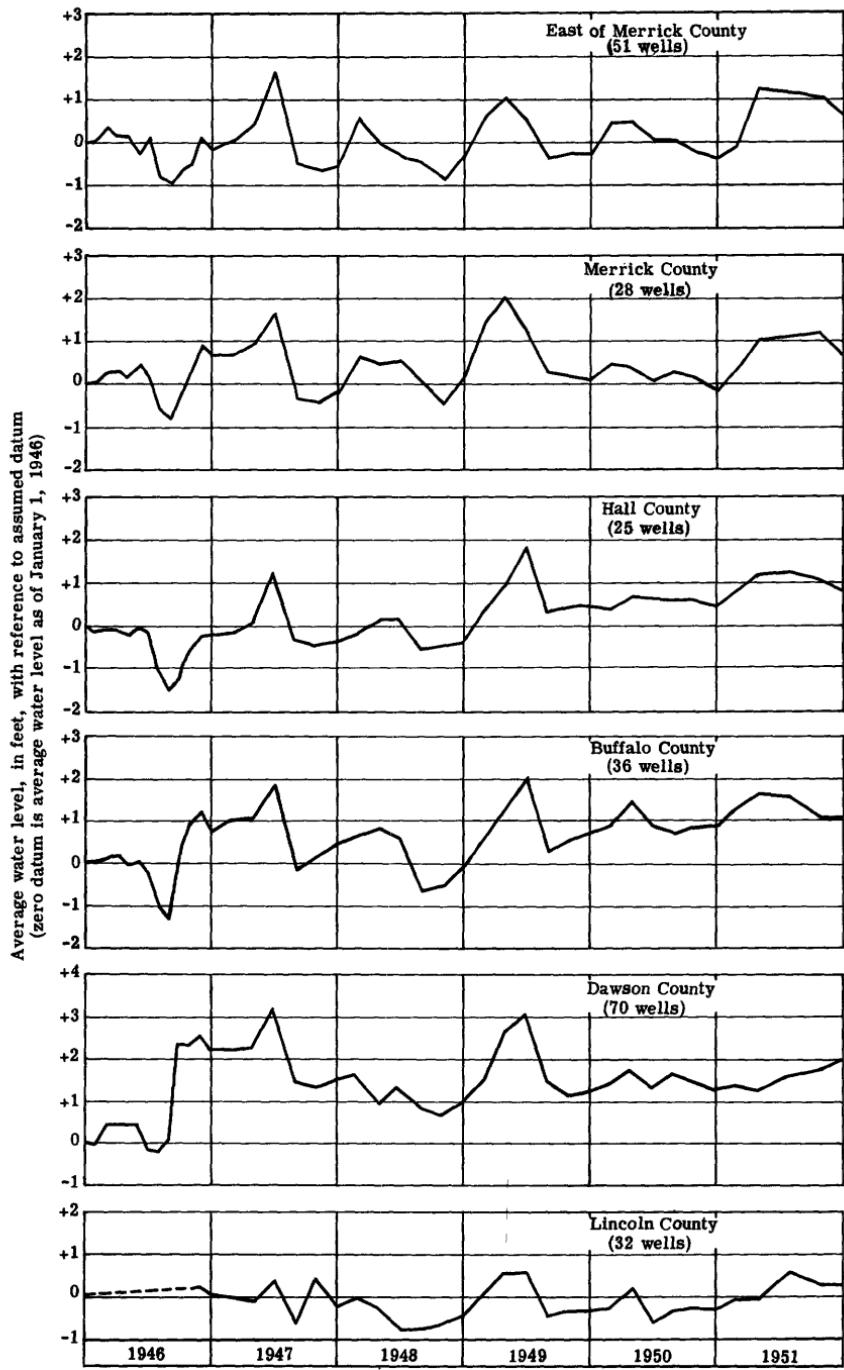


Figure 13. --Weighted average water levels in selected wells in the lower Platte River valley, Nebraska, 1946-51.

6-11-22cc. Owner unknown. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 145 feet. Highest water level 90.26 below lsd, Oct. 24, 1951; lowest 91.83 below lsd, Mar. 15, 1951. Records available: 1950-51. Jan. 22, 90.99; Mar. 15, 91.83; May 25, 91.46; Oct. 24, 90.26.

7-9-12dc. Eugene Halloran. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 205 feet. Land-surface datum is 1,890.48 feet above msl. Highest water level 110.76 below lsd, Jan. 20, May 25, 1951; lowest 111.53 below lsd, June 28, 1948. Records available: 1948-51. Jan. 20, 110.76; Mar. 15, 110.86; May 25, 110.76; Oct. 25, 110.82.

7-10-23ab. Henry Fricke. Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 8 inches, depth 155 feet. Land-surface datum is 1,927 feet above msl. Highest water level 99.95 below lsd, Jan. 22, Mar. 14, 1935; lowest 102.96 below lsd, Sept. 18, 1948. Records available: 1934-38, 1948-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	101.45	101.51	101.52	101.58	101.57	101.45	101.39	.....	101.96	101.90	101.79	101.69
2	101.39	101.50	101.40	101.57	101.59	101.46	101.39	.....	101.95	101.91	101.78	101.68
3	101.44	101.50	101.54	101.57	101.57	101.47	101.41	.....	101.95	101.91	101.79	101.75
4	101.47	101.53	101.52	101.56	101.56	101.45	101.40	.....	101.95	101.98	101.79	101.71
5	101.47	101.47	101.45	101.55	101.58	101.42	101.38	.....	101.95	101.98	101.77	101.68
6	101.45	101.53	101.47	101.58	101.59	101.41	101.36	.....	101.95	101.94	101.74	101.80
7	101.40	101.49	101.50	101.58	101.55	101.44	101.35	.....	101.95	101.94	101.74	101.81
8	101.37	101.46	101.55	101.57	101.51	101.47	101.38	.....	101.95	101.94	101.71	101.79
9	101.43	101.47	101.47	101.55	101.53	101.47	101.37	.....	101.94	101.78	101.74	101.75
10	101.43	101.50	101.48	101.60	101.55	101.44	101.36	.....	101.94	101.78	101.72	101.70
11	101.38	101.48	101.57	101.57	101.53	101.41	101.35	.....	101.94	101.73	101.70	101.70
12	101.40	101.55	101.50	101.57	101.56	101.43	101.35	.....	101.95	101.74	101.66	101.74
13	101.41	101.59	101.48	101.53	101.55	101.43	101.35	.....	101.95	101.76	101.74	101.73
14	101.39	101.52	101.51	101.60	101.53	101.42	101.34	.....	101.94	101.76	101.74	.....
15	101.44	101.48	101.57	101.61	.....	101.40	.....	.....	101.95	101.73	101.75	.....
16	101.38	101.48	101.60	101.58	.....	101.42	.....	.....	101.93	101.79	101.78	.....
17	101.38	101.49	101.64	101.51	.....	101.43	.....	.....	101.91	101.75	101.78	.....
18	101.38	101.50	101.64	101.61	.....	101.44	.....	.....	101.90	101.75	101.70	.....
19	101.42	101.55	101.59	101.60	.....	101.44	.....	.....	101.90	101.75	101.70	.....
20	101.47	101.54	101.60	101.55	.....	101.44	.....	.....	101.96	101.65	101.68	.....
21	101.42	101.50	101.58	101.63	.....	101.42	.....	.....	101.96	101.72	101.74	.....
22	101.56	101.53	101.58	101.63	.....	101.42	.....	.....	101.91	101.75	101.74	.....
23	101.58	101.50	101.67	101.53	.....	101.44	.....	101.90	101.95	101.71	101.76	.....
24	101.58	101.47	101.63	101.55	.....	101.45	.....	101.90	101.90	101.69	101.76	.....
25	101.51	101.50	101.58	101.61	101.43	101.40	.....	102.00	101.90	101.73	101.76	.....
26	101.47	101.54	101.56	101.57	101.48	101.41	.....	101.96	101.98	101.75	101.76	.....
27	101.59	101.43	101.56	101.56	101.45	101.45	.....	101.95	101.98	101.75	101.73	.....
28	101.59	101.43	101.61	101.53	101.42	101.45	.....	101.92	101.95	101.73	101.73	.....
29	101.56	.....	101.60	101.51	101.45	101.40	.....	101.95	101.90	101.70	101.71	.....
30	101.52	.....	101.57	101.56	101.44	101.41	.....	101.95	101.90	101.81	101.71	.....
31	101.53	.....	101.58	.....	101.44	.....	101.96	.....	101.81	.....	.....	.....

7-11-3cb. Vic Katzberg. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 182 feet. Land-surface datum is 2,020.04 feet above msl. Highest water level 110.80 below lsd, Jan. 22, 1951; lowest 112.20 below lsd, May 11, 1948. Records available: 1947-51. Jan. 22, 110.80; Mar. 15, 110.82; May 25, 111.05; Aug. 22, 111.13; Oct. 24, 110.84.

7-12-15ca. Roscoe Karr. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 180 feet. Land-surface datum is 2,056.9 above msl. Highest water level 94.89 below lsd, Oct. 24, 1951; lowest 98.05 below lsd, Nov. 17, 1947. Records available: 1947-51. Jan. 22, 95.60; Mar. 15, 95.74; Oct. 24, 94.89.

8-9-14ac. Charles Anderson. Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 149 feet. Land-surface datum is 1,907.71 feet above msl. Highest water level 108.27 below lsd, Oct. 25, 1951; lowest 113.35 below lsd, Aug. 6, 1949. Records available: 1948-51. Jan. 22, 108.49; Mar. 15, 108.56; Aug. 22, 109.26; Oct. 25, 108.27.

8-10-26da. Stultz. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 162 feet. Highest water level 96.10 below lsd, Aug. 22, 1951; lowest 97.43 below lsd, June 3, 1949. Records available: 1948-51. Jan. 22, 96.69; Mar. 15, 96.80; May 25, 96.59; Aug. 22, 96.10; Oct. 25, 96.68.

8-12-8ab. E. Woodman. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 85 feet. Land-surface datum is 2,009.14 above msl. Highest water level 6.15 below lsd, July 8, 1949; lowest 9.72 below lsd, Sept. 7, 1946. Records available: 1946-51. Jan. 13, 7.03; Mar. 30, 6.67; May 3, 6.31; July 26, 6.35; Oct. 24, 6.90.

#### Antelope County

24-6-2aa. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 16 feet. Highest water level 0.05 below lsd, May 29, 1951; lowest 7.88 below lsd, Sept. 12, 1935. Records available: 1934-42, 1944-51. Jan. 16, 3.80; Mar. 9, 3.59; May 29, 0.05; Aug. 31, 1.94; Oct. 17, 2.15; Nov. 8, 2.54.

#### Arthur County

17-38-21bd. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in fine sand, diameter 2 inches, depth 65 feet. Highest water level 29.48 below lsd, Dec. 4, 1934; lowest 32.95 below lsd, May 22, 1951. Records available: 1934-42, 1944, 1951. Jan. 10, 32.94; Mar. 28, 32.93; May 22, 32.95; Oct. 3, 32.48.

#### Banner County

19-54-15bb. Bert Rodgers. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 50 feet. Highest water level 22.40 below lsd, July 13, 1949; lowest 24.39 below lsd, Oct. 19, 1950. Records available: 1949-51. Jan. 18, 23.83; Mar. 21, 23.88; May 18, 24.26, nearby well being pumped; July 20, 23.94; Sept. 18, 23.89.

19-55-29ac. Fred Gránt. Dug unused water-table well in sand of Pleistocene age, concrete lining, size 6 by 8 feet, depth 44 feet. Highest water level 26.38 below lsd, Oct. 27, 1938; lowest 36.40 below lsd, May 18, 1951. Records available: 1934-42, 1949-51. Jan. 18, 35.33; Mar. 21, 36.00; May 18, 36.40; July 20, 34.93; Sept. 18, 31.74.

#### Blaine County

22-24-33ca. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 13 feet. Highest water level 1.04 below lsd, Mar. 8, 1950; lowest 6.97 below lsd, Aug. 8, 1951. Records available: 1934-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	3.73	Apr. 17	3.34	June 28	2.81	Oct. 2	4.15
Feb. 2	3.87	18	3.40	July 10	3.13	16	4.32
7	3.72	25	2.80	25	3.55	30	4.12
19	3.44	26	3.03	Aug. 8	6.97	31	4.10
22	3.45	May 2	2.95	22	4.21	Nov. 14	4.07
Mar. 7	3.13	22	1.55	Sept. 4	3.28	28	4.07
13	3.35	23	1.81	6	3.80	Dec. 12	4.03
22	3.32	29	2.47	20	3.97	27	3.83
Apr. 3	3.20	June 10	2.20				

23-22-22cb. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 22 feet. Land-surface datum is 2,496.6 feet above msl. Highest water level 15.43 below lsd, Oct. 18, 1951; lowest 18.12 below lsd, July 23, 1940. Records available: 1936-42, 1949-51. Oct. 18, 15.43.

#### Boone County

18-7-4ca. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 22 feet. Highest water level 10.82 below lsd, July 24, 1950; lowest 15.17 below lsd, Oct. 26, 1940. Records available: 1937-42, 1948-51. Feb. 19, 13.40; May 8, 12.81; Aug. 13, 12.66; Dec. 27, 12.78.

19-5-28cd. Lawrence Bryan. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, reported depth 147 feet. Highest water level 31.62 below lsd, July 25, 1950; lowest 34.88 below lsd, Sept. 29, 1948. Records available: 1948-51. Jan. 2, 33.04; Feb. 20, 33.49; Aug. 22, 33.09.

19-8-16cc. Charles J. Dresch. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, reported depth 165 feet. Highest water level 43.66 below lsd, May 8, 1951; lowest 46.11 below lsd, Aug. 4, 1949. Records available: 1948-51. Feb. 19, 44.04; May 8, 43.66; Aug. 13, 44.21; Dec. 26, 43.90.

20-6-23bb. W. W. Redler. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 22 inches, depth 100 feet. Highest water level 28.15 below lsd, July 25, 1950; lowest 32.55 below lsd, Sept. 28, 1948. Records available: 1948-51. Jan. 2, . 30.44; Feb. 20, 30.57; May 4, 29.33; Aug. 22, 29.69.

21-7-26ca. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in loess of Pleistocene age, diameter 3 inches, depth 24 feet. Highest water level 14.13 below lsd, Aug. 22, 1950; lowest 21.07 below lsd, Oct. 14, 1938. Records available: 1936-42, 1948-51. Jan. 8, 15.27; Feb. 20, 15.53; May 4, 14.51; Dec. 27, 14.27.

#### Box Butte County

24-47-1db. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter 1½ inches, depth 19 feet. Land-surface datum is 3,909.4 feet above msl. Highest water level 11.14 below lsd, Mar. 25, 1948; lowest 12.45 below lsd, May 14, 1946. Records available: 1946-51. Feb. 19, 11.77; Apr. 19, 11.79; Sept. 4, 11.45.

24-48-10bb. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 8 inches, depth 26 feet. Land-surface datum is 3,941.1 feet above msl. Highest water level 9.82 below lsd, July 14, 1949; lowest 12.85 below lsd, Sept. 5, 1951. Records available: 1946-51.

Daily lowest water level from recorder graph\*

Day	Jan.	Feb.	Mar.	Apr.	May	June	Sept.
1	12.41	12.46	12.52	12.55	12.56	12.57	.....
2	12.41	12.46	12.52	12.55	12.56	12.57	.....
3	12.41	12.46	12.52	12.55	12.56	12.57	.....
4	12.41	12.47	12.52	12.55	12.56	12.57	.....
5	12.41	12.47	12.52	12.55	12.56	12.57	12.85
6	12.42	12.47	12.52	12.55	12.56	12.57	.....
7	12.42	12.48	12.53	12.55	12.56	12.57	.....
8	12.42	12.48	12.53	12.55	12.57	12.58	.....
9	12.42	12.48	12.53	12.55	12.57	12.58	.....
10	12.42	12.48	12.54	12.55	12.57	12.58	.....
11	12.43	12.48	12.55	12.55	12.57	12.58	.....
12	12.43	12.48	12.55	12.55	12.57	12.58	.....
13	12.43	12.49	12.55	12.55	12.57	12.58	.....
14	12.43	12.49	12.55	.....	12.57	12.58	.....
15	12.43	12.49	12.55	.....	12.57	12.58	.....
16	12.43	12.49	12.55	.....	12.58	12.58	.....
17	12.44	12.50	12.55	.....	12.58	12.58	.....
18	12.44	12.50	12.55	.....	12.57	12.58	.....
19	12.44	12.50	12.55	12.56	12.57	12.58	.....
20	12.44	12.50	12.55	12.56	12.57	12.58	.....
21	12.45	12.50	12.55	12.56	12.57	12.58	.....
22	12.45	12.50	12.55	12.56	12.57	12.58	.....
23	12.46	12.50	12.55	12.55	12.57	12.59	.....
24	12.46	12.50	12.55	12.55	12.57	12.60	.....
25	12.46	12.51	12.55	12.55	12.57	12.62	.....
26	12.47	12.51	12.55	12.55	12.58	12.62	.....
27	12.47	12.51	12.55	12.56	12.58	12.62	.....
28	12.46	12.52	12.55	12.56	12.58	12.63	.....
29	12.46		12.55	12.56	12.57	12.63	.....
30	12.45		12.55	12.56	12.57	.....	.....
31	12.45		12.55		12.56		

\* No record for July, August, October, November, and December.

24-52-13ccb1. Dr. G. D. Shepard. Drilled domestic water-table well in sand of Tertiary age, diameter 6 inches, depth 85 feet. Highest water level 74.35 below lsd, Sept. 14, 1949; lowest 78.55 below lsd, Sept. 1, 1948. Records available: 1938, 1940, 1942, 1944, 1946-51. Feb. 20, 77.48; Apr. 18, 77.93.

24-52-35aa. G. Arthur Bailey. Drilled stock water-table well in sand of Tertiary age, diameter 4 inches, depth 120 feet. Highest water level 97.61 below lsd, July 22, 1940; lowest 99.13 below lsd, May 9, 1946. Records available: 1938-41, 1946-51. Feb. 20, 97.73; Apr. 18, 97.74.

25-46-4ddd1. Formerly 25-48-4dd. U. S. Geol. Survey. Drilled observation water-table well in sand of Tertiary age, diameter 1½ inches, depth 98 feet. Land-surface datum is 4,032.95 feet above msl. Highest water level 63.14 below lsd, Jan. 25, 1950; lowest 64.70 below lsd, Sept. 6, 1951. Records available: 1946-51. Feb. 19, 64.03; Apr. 17, 63.72; Sept. 6, 64.70.

25-48-30ad. Mrs. Effie A. Wells. Drilled unused water-table well in sand of Pleistocene age, diameter 6 inches, depth 21 feet. Highest water level 12.54 below lsd, July 11, 1946; lowest 15.40 below lsd, July 22, 1940. Records available: 1938-42, 1944, 1946-47, 1949-51. Feb. 19, 13.56; Apr. 17, 13.62; Sept. 6, 14.43.

25-50-31ab1. Martin Jacobsen. Drilled unused water-table well in Arikaree group of Tertiary age, diameter 6 inches, depth 109 feet. Land-surface datum is 4,220.29 feet above msl. Highest water level 100.52 below lsd, Jan. 23, 1950; lowest 103.41 below lsd, Oct. 20, 1941. Records available: 1934-42, 1944, 1946-51. Feb. 20, 102.40; Apr. 18, 102.47; Sept. 6, 102.41.

26-47-35dd. U. S. Geol. Survey. Driven observation water-table well in sandstone of Ogallala formation of Tertiary age, diameter  $1\frac{1}{4}$  inches, depth 15 feet. Land-surface datum is 3,900.9 feet above msl. Highest water level 11.83 below lsd, Mar. 26, 1948; lowest 13.81 below lsd, Oct. 17, 1950. Records available: 1946-51. Feb. 20, 13.52; Apr. 18, 13.37.

26-50-12dc. Mrs. L. A. Rosenberg. Dug domestic water-table well in sandstone of Tertiary age, concrete lining, diameter 4 feet, depth 106 feet. Land-surface datum is 4,231.51 feet above msl. Highest water level 100.43 below lsd, Apr. 17, 1951; lowest 102.38 below lsd, Nov. 12, 1946. Records available: 1938-42, 1946-51. Apr. 17, 100.43; Sept. 6, 100.55.

26-51-25bcc1. O. T. Wilkins. Drilled stock water-table well in sandstone of Tertiary age, diameter 4 inches, depth 108 feet. Land-surface datum is 4,299.23 feet above msl. Highest water level 95.43 below lsd, Sept. 5, 1951; lowest 96.50 below lsd, Feb. 19, 1947. Records available: 1938-42, 1944, 1946-51. Feb. 20, 95.54; Apr. 18, 95.60; Sept. 5, 95.43.

26-52-10bc. G. E. Dyer. Drilled irrigation water-table well in Harrison sandstone of Tertiary age, diameter 24 inches, depth 198 feet. Land-surface datum is 4,436 feet above msl. Highest water level 93.37 below lsd, July 22, 1938; lowest 101.02 below lsd, Sept. 1, 1948. Records available: 1938-40, 1942, 1946-51. Feb. 20, 94.29; Apr. 18, 94.18; Sept. 5, 97.40.

27-47-23bad. J. F. Shramek. Drilled unused water-table well in Harrison sandstone of Tertiary age, diameter 6 inches, depth 64 feet. Land-surface datum is 3,889.77 feet above msl. Highest water level 16.34 below lsd, Sept. 13, 1949; lowest 29.94 below lsd, Nov. 2, 1940. Records available: 1938-42, 1944, 1946-51. Feb. 20, 18.85; Apr. 18, 19.19; Sept. 5, 16.61.

27-49-21cb. Edward S. Wildy. Drilled stock water-table well in sand of Arikaree group of Tertiary age, diameter 4 inches, depth 156 feet. Highest water level 115.45 below lsd, Sept. 13, 1949; lowest 119.41 below lsd, Oct. 20, 1941. Records available: 1935-42, 1944-51. Feb. 19, 117.17; Apr. 17, 117.13; Sept. 6, 117.06.

27-51-6bb. Louis Hornrichausen. Drilled unused water-table well in Harrison sandstone of Tertiary age, diameter 6 inches, depth 225 feet. Land-surface datum is 4,493.56 feet above msl. Highest water level 219.80 below lsd, Oct. 17, 1950; lowest 223.55 below lsd, Nov. 22, 1949. Records available: 1946-51. Feb. 20, 222.16; Apr. 18, 221.04; Sept. 5, 222.24.

28-51-6dd. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 11 feet. Land-surface datum is 4,115.33 feet above msl. Highest water level 1.62 below lsd, Jan. 24, 1950; lowest 4.08 below lsd, July 20, 1940. Records available: 1935-42, 1944-51. Feb. 20, 1.77; Apr. 18, 2.20. Measurement discontinued.

#### Brown County

30-21-19cc. Consumers Public Power District. Drilled unused water-table well in sand of Pleistocene age, diameter 6 inches, depth 57 feet. Land-surface datum is 2,509.07 feet above msl. Highest water level 35.06 below lsd, Dec. 28, 1951; lowest 40.12 below lsd, Jan. 13, 1948. Records available: 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	37.59	Mar. 5	37.48	June 7	37.46	Oct. 2	35.98
8	37.56	12	37.54	11	37.49	18	35.78
15	37.59	19	37.52	18	37.48	19	35.73
22	37.54	26	37.49	30	37.39	24	35.64
29	37.54	31	37.49	July 5	37.37	31	35.58
Feb. 5	37.52	Apr. 2	37.54	31	37.12	Nov. 19	35.36
13	37.56	30	37.48	Aug. 29	36.63	28	35.27
19	37.52	May 2	37.47	Sept. 11	36.37	Dec. 28	35.06
26	37.54	29	37.53	28	36.09		

30-22-19aa. Roy Snyder. Drilled stock water-table well in sand of Pleistocene age, diameter 5 inches, depth 63 feet. Land-surface datum is 2,564.38 feet above msl. Highest water level 35.07 below lsd, Feb. 16, 1951; lowest 38.73 below lsd, Apr. 20, 1949. Records available: 1947-51. Feb. 16, 35.07; Mar. 31, 36.13; May 2, 36.17. Measurement discontinued.

30-22-27dc. T. S. Bower. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 9 inches, depth 59 feet. Land-surface datum is 2,533.79 feet above msl. Highest water level 12.40 below lsd, July 5, 1951; lowest 18.87 below lsd, Aug. 9, 1937. Records available: 1934-45, 1947-51. Feb. 19, 15.05; Mar. 31, 15.02; May 2, 14.85; June 7, 12.92; July 5, 12.40; Sept. 11, 13.24; Nov. 19, 13.81.

30-23-13bc. M. A. Miles. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 80 feet. Land-surface datum is 2,572.7 feet above msl. Highest water level 36.26 below lsd, Nov. 19, 1951; lowest 39.50 below lsd, Nov. 20, 1944. Records available: 1941, 1944, 1947-51. Feb. 16, 37.59; Mar. 31, 37.63; May 2, 37.62; July 5, 36.91; Sept. 11, 36.48; Nov. 19, 36.26.

30-23-21bc. U. S. Geol. Survey. Jetted observation water-table well in sand of Pleistocene age, diameter  $\frac{1}{4}$  inch, depth 13 feet. Land-surface datum is 2,583.47 feet above msl. Highest water level 0.34 below lsd, Sept. 11, 1951; lowest 3.22 below lsd, July 6, 1950. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	2.85	May 2	1.99	July 5	0.81	Nov. 19	0.37
Mar. 31	2.57	June 4	.81	Sept. 11	.34	Dec. 29	j.55

j Frozen.

30-24-14cb. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 19 feet. Land-surface datum is 2,525.7 feet above msl. Highest water level 12.65 below lsd, June 12, 1951; lowest 13.77 below lsd, Feb. 9, 1951. Records available: 1951.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	13.77	May 2	13.39	July 20	13.06	Nov. 19	13.36
Mar. 31	13.67	June 12	12.65	Sept. 12	13.06	Dec. 29	13.27

#### Buffalo County

8-16-12cc. M. M. Garvin. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 29 feet. Land-surface datum is 2,139.27 feet above msl. Highest water level 1.58 below lsd, May 9, 1933; lowest 7.80 below lsd, Jan. 7, 1947. Records available: 1930, 1932-51. Jan. 9, 5.43; Mar. 27, 5.49; May 7, 5.69; July 25, 4.95; Oct. 18, 4.98.

8-17-1da. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand and gravel of Pleistocene age, diameter 1 inch, depth 18 feet. Land-surface datum is 2,185.52 feet above msl. Highest water level 4.18 below lsd, Oct. 7, 1946; lowest 11.90 below lsd, Nov. 3, 1934. Records available: 1931-51. Jan. 9, 8.10; Mar. 27, 7.62; May 7, 7.07; Oct. 18, 8.28.

9-13-5cb. F. M. Scott. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 52 feet. Land-surface datum is 2,050.13 feet above msl. Highest water level 16.54 below lsd, May 20, 1931; lowest 22.92 below lsd, Oct. 4, 1948. Records available: 1930-51. Jan. 8, 18.47; Mar. 26, 17.77; May 4, 17.92; July 25, 17.00.

9-14-1dc. U. S. Geol. Survey. Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 8 inches, depth 37 feet. Land-surface datum is 2,060.43 feet above msl. Highest water level 15.52 below lsd, July 19-20, 1951; lowest 19.79 below lsd, Sept. 5, 1946. Records available: 1946-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.44	16.25	16.18	16.10	15.95	15.80	15.60	16.09	17.04	16.90	16.84	16.59
2	16.41	16.22	16.07	16.10	15.97	15.80	15.60	16.21	17.06	16.86	16.83	16.58
3	16.43	16.20	16.09	16.05	15.95	15.80	15.61	16.30	17.06	16.85	16.80	16.59
4	16.46	16.22	16.17	16.04	15.95	15.79	15.61	16.38	17.06	16.93	16.80	16.59
5	16.48	16.18	16.10	16.03	15.97	15.76	15.58	16.43	17.06	16.95	16.80	16.55
6	16.50	16.18	16.10	16.04	15.99	15.74	15.57	16.50	17.06	16.95	16.78	16.59
7	16.51	16.25	16.16	16.04	15.97	15.74	15.55	16.55	17.07	16.95	16.78	.....
8	16.32	16.20	16.17	16.04	15.91	15.76	15.57	16.62	17.05	16.94	16.73	.....
9	16.32	16.21	16.16	16.03	15.92	15.76	15.59	16.65	17.02	16.92	16.74	.....
10	16.35	16.20	16.14	16.03	15.93	15.74	15.59	16.72	17.02	16.90	16.74	.....

9-14-1dc--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	16.30	16.18	16.17	16.06	15.92	15.71	15.60	16.77	17.00	16.86	16.73	.....
12	16.31	16.19	16.18	16.05	15.89	15.70	15.60	16.82	17.04	16.85	16.66	.....
13	16.34	16.25	16.12	16.01	15.90	15.70	15.60	16.85	17.04	16.85	16.68	.....
14	16.29	16.26	16.12	16.01	15.90	15.70	15.57	16.92	17.05	16.87	16.70	.....
15	16.31	16.20	16.11	16.04	15.91	15.68	15.56	16.94	17.05	16.86	16.75	.....
16	16.26	16.17	16.06	16.04	15.90	15.69	15.56	16.94	17.05	16.88	16.78	.....
17	16.27	16.17	16.07	15.98	15.86	15.69	15.56	16.95	17.00	16.90	16.78	.....
18	16.26	16.17	16.12	15.99	15.85	15.69	15.55	16.96	17.00	16.92	16.73	.....
19	16.25	16.17	16.12	16.04	15.86	15.68	15.52	16.96	16.97	16.92	16.68	.....
20	16.60	16.20	16.12	16.02	15.86	15.67	15.52	16.97	16.98	16.82	16.66	.....
21	16.26	16.17	16.07	16.02	15.86	15.65	15.55	17.01	17.00	16.84	16.66	16.45
22	16.22	16.18	16.03	16.06	15.86	15.66	15.55	17.03	17.00	16.88	16.67	16.48
23	16.25	16.17	16.03	16.01	15.85	15.67	15.53	17.03	16.97	16.88	16.68	16.50
24	16.28	16.13	16.10	16.00	15.82	15.67	15.55	17.03	16.97	16.85	16.68	16.50
25	16.25	16.13	16.09	16.00	15.84	15.63	15.60	17.03	16.97	16.83	16.67	16.48
26	16.19	16.13	16.03	15.99	15.84	15.63	15.67	17.03	16.97	16.85	16.67	16.50
27	16.25	16.11	16.03	15.98	15.83	15.67	15.74	17.02	16.98	16.84	16.65	16.50
28	16.31	16.09	16.07	15.96	15.80	15.65	15.78	17.03	16.98	16.80	16.63	16.44
29	16.32	16.08	16.08	15.93	15.81	15.61	15.85	17.03	16.93	16.78	16.62	16.44
30	16.27	16.08	16.08	15.92	15.79	15.61	15.90	17.03	16.91	16.84	16.61	16.42
31	16.27	16.07	16.07					16.00	17.04		16.84	16.45

9-14-13cb. Mrs. Maude E. Davis. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 50 feet. Land-surface datum is 2,068.10 feet above msl. Highest water level 15.30 below lsd, July 11, 1947; lowest 23.05 below lsd, Oct. 15, 1941. Records available: 1930-51. Jan. 8, 17.72; Mar. 26, 17.73; May 4, 17.62; Oct. 17, 18.46.

9-14-19dd. Robert D. Lewis. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 54 feet. Land-surface datum is 2,102.16 feet above msl. Highest water level 22.55 below lsd, June 9, 1931; lowest 28.53 below lsd, Oct. 15, 1941. Records available: 1930-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	24.48	Mar. 27	24.36	July 4	23.77	Oct. 27	24.49
30	24.39	Apr. 27	24.79	27	23.59	Nov. 28	24.45
Feb. 26	24.41	May 27	24.27	Sept. 28	23.92		

9-15-11cb. Charles Aldeen. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 53 feet. Land-surface datum is 2,117.20 feet above msl. Highest water level 23.67 below lsd, July 11, 1947; lowest 29.96 below lsd, Oct. 15, 1941. Records available: 1932-42, 1944-51. Jan. 8, 24.44; Mar. 26, 24.70; May 4, 24.80; July 25, 24.57; Oct. 17, 26.17.

9-15-34bb. J. W. Wolford. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 48 feet. Land-surface datum is 2,119.78 feet above msl. Highest water level 16.60 below lsd, June 16, 1931; lowest 25.35 below lsd, Nov. 3, 1948. Records available: 1930-37, 1939, 1945-51. Jan. 9, 19.34; Mar. 26, 18.95; May 4, 19.32; Oct. 17, 19.57.

9-16-13bc. Lawrence Richter. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 110 feet. Land-surface datum is 2,153.47 feet above msl. Highest water level 26.64 below lsd, Mar. 1, 1950; lowest 29.66 below lsd, Aug. 23, 1951. Records available: 1948-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5, 1950	27.79	June 9, 1950	27.28	Nov. 30, 1950	27.27	Apr. 30, 1951	27.15
Feb. 7	27.65	July 17	27.38	Jan. 3, 1951	27.19	May 30	27.17
Mar. 1	26.64	Sept. 7	27.84	29	27.26	July 26	27.30
27	27.48	Oct. 3	27.48	Mar. 17	27.11	Aug. 23	29.66
May 4	27.38	Nov. 2	27.39	Apr. 6	27.20	28	28.98

9-17-31cd. U. S. Geol. Survey. Driven observation water-table well in alluvial silt, diameter 1 1/4 inches, depth 10 feet. Land-surface datum is 2,236.73 feet above msl. Highest water level 8.02 below lsd, Oct. 7, 1946; lowest 13.01 below lsd, Mar. 9, 1948. Records available: 1946-51. Jan. 9, 10.75; Mar. 27, 10.81; May 7, 11.73; Aug. 2, 10.04; Oct. 18, 10.15.

9-18-31cc. Mrs. Dworak. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 32 feet. Land-surface datum is 2,274.59 feet above msl. Highest water level 7.38 below lsd, Oct. 8, 1946; lowest 12.50 below lsd, Sept. 7, 1948. Records available: 1946-51. Oct. 18, 10.64.

10-13-24bc. B. M. Bentley. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 52 feet. Land-surface datum is 2,214.17 feet above msl. Highest water level 17.9 below lsd, May 13, 1931; lowest 26.28 below lsd, Sept. 5, 1946. Records available: 1930-40, 1944, 1946-51. Jan. 8, 23.74; Mar. 26, 22.98; May 4, 22.92; July 25, 22.00; Oct. 17, 22.67.

10-17-21cd. W. M. Buettner. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 104 feet. Land-surface datum is 2,234.14 feet above msl. Highest water level 27.23 below lsd, Mar. 27, 1950; lowest 38.75 below lsd, Aug. 2, 1949. Records available: 1934-42, 1949-51. Jan. 3, 28.17; Jan. 29, 28.30; Mar. 17, 28.10; Apr. 6, 28.12; Apr. 30, 27.99; May 30, 28.06; July 26, 35.40; Dec. 12, 28.16.

12-13-20cb. Irvin Urwiller. Drilled irrigation water-table well in sand of Pleistocene age and sandstone of Tertiary age, diameter 18 inches, depth 207 feet. Land-surface datum is 2,030.68 feet above msl. Highest water level 25.21 below lsd, Dec. 13, 1951; lowest 25.76 below lsd, Sept. 6, 1950. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 3, 1950	25.46	Dec. 1, 1950	25.37	Apr. 6, 1951	25.44	July 26, 1951	25.47
Sept. 6	25.76	Jan. 4, 1951	25.49		28	Aug. 20	25.51
Oct. 4	25.53	30	25.47	May 30	25.49	Dec. 13	25.21
Nov. 3	25.54	Mar. 3	25.45				

12-15-3bb. Donald Wilke. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 110 feet. Land-surface datum is 2,061.13 feet above msl. Highest water level 29.30 below lsd, May 30, 1951; lowest 30.47 below lsd, Aug. 20, 1951. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 29, 1950	29.88	Jan. 4, 1951	29.92	Apr. 6, 1951	29.73	July 26	29.56
Oct. 4	30.08	30	29.90		28	Aug. 20	30.47
Nov. 3	30.10	Mar. 3	29.78	May 30	29.30		
Dec. 1	29.90					27	30.30

#### Butler County

A14-3-8ba. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in glacial drift and sand, diameter 1 $\frac{1}{4}$  inches, depth 29 feet. Highest water level 10.18 below lsd, Apr. 21, 1948; lowest 18.63 below lsd, Oct. 15, 1940. Records available: 1940-42, 1946, 1948. No measurement made in 1951.

A16-1-14ad. Owner unknown. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 33 feet. Land-surface datum is 1,434.34 feet above msl. Highest water level 5.38 below lsd, Apr. 19, 1949; lowest 7.69 below lsd, Mar. 3, 1947. Records available: 1946-50. No measurement made in 1951.

A16-2-14cc. U. S. Geol. Survey. Driven observation water-table well in fine sand, diameter 1 $\frac{1}{2}$  inches, depth 13 feet. Land-surface datum is 1,419.64 feet above msl. Highest water level 3.22 below lsd, Apr. 19, 1949; lowest 6.74 below lsd, Jan. 8, 1951. Records available: 1946-51. Jan. 8, 6.74; Mar. 13, 6.48; May 2, 4.39; Aug. 15, 3.69; Oct. 31, 4.12.

A16-3-1dc. Anthony J. Viglicky. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 36 inches, depth 37 feet. Land-surface datum is 1,376.67 feet above msl. Highest water level 8.11 below lsd, July 7, 1947; lowest 12.99 below lsd, Jan. 8, 1951. Records available: 1946-51. Jan. 8, 12.99; Mar. 13, 12.38; May 2, 10.16; Aug. 15, 10.23; Oct. 31, 12.07.

A17-4-28cd. Edward J. Duda. Driven irrigation water-table well in sand and gravel of Pleistocene age, diameter 22 inches, depth 66 feet. Land-surface datum is 1,346.84 feet above msl. Highest water level 19.55 below lsd, July 7, 1947; lowest 22.10 below lsd, Oct. 11, 1946. Records available: 1946-51. Jan. 8, 21.86; Mar. 3, 21.18; May 2, 20.31; Aug. 15, 20.00; Oct. 31, 19.56.

#### Chase County

5-36-7ba. U. S. Geol. Survey. Driven observation water-table well in limestone of Ogallala formation, diameter 1 $\frac{1}{4}$  inches, depth 19 feet. Highest water level 14.93 below lsd, June 9, 1949; lowest 16.86 below lsd, Dec. 7, 1950. Records available: 1946-51. May 9, 16.28; June 7, 16.64; July 5, 16.80; Aug. 21, 16.39; Oct. 8, 16.70; Dec. 27, 16.54.

5-38-4aa. U. S. Bureau of Reclamation. Jetted observation water-table well in sand and gravel, diameter 1 $\frac{1}{2}$  inches, depth 23 feet. Land-surface datum is 3,151.20 feet above msl. Highest water level 10.79 below lsd, June 9, 1949; lowest 11.44 below lsd, July 11, 1950. Records available: 1949-50. No measurement made in 1951.

## NEBRASKA, CHERRY COUNTY

121

6-37-32dc. U. S. Bureau of Reclamation. Drilled unused water-table well in sand of Pleistocene age, diameter 18 inches, depth 100 feet. Land-surface datum is 3,089.8 feet above msl. Highest water level 5.25 below lsd, Feb. 16, 1951; lowest 19.65 below lsd, Oct. 7, 1948. Records available: 1948-51. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan.	1 11.83	Jan.	13 10.22	Jan.	25 8.61	Feb.	6 6.94
	2 11.66		14 10.10		26 8.44		7 6.83
	3 11.52		15 9.97		27 8.35		8 6.58
	4 11.44		16 9.80		28 8.22		9 6.51
	5 11.28		17 9.70		29 8.14		10 6.30
	6 11.17		18 9.56		30 8.00		11 6.10
	7 11.03		19 9.44		31 7.83		12 5.97
	8 10.87		20 9.35		Feb. 1 7.71		13 5.85
	9 10.71		21 9.25		2 7.56		14 5.68
	10 10.63		22 9.04		3 7.39		15 5.45
	11 10.47		23 8.94		4 7.28		16 5.25
	12 10.33		24 8.77		5 7.08		

7-38-28cc. Roy Hust. Drilled unused water-table well in sand of Pleistocene age, diameter 18 inches, depth 143 feet. Highest water level 74.03 below lsd, May 5, 1951; lowest 76.85 below lsd, Dec. 9, 1944. Records available: 1944, 1948-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	75.14	.....	.....	75.03	74.82	74.84	.....	74.92	74.98	74.87	.....	.....
2	75.10	.....	.....	74.89	74.83	74.86	.....	74.96	74.96	74.82	.....	.....
3	75.17	.....	74.90	74.85	74.82	74.91	.....	75.00	74.95	74.87	.....	.....
4	75.17	.....	74.90	74.89	75.00	74.92	.....	74.94	74.95	74.98	.....	.....
5	75.19	.....	74.90	74.91	74.03	74.86	75.03	74.94	74.95	74.98	.....	.....
6	75.25	.....	74.85	74.88	74.95	74.82	75.00	74.93	74.97	74.98	.....	.....
7	75.16	.....	74.85	74.87	74.85	74.88	74.95	74.90	74.96	74.95	.....	.....
8	75.07	.....	74.90	74.86	74.85	74.95	75.00	74.92	74.90	74.86	.....	.....
9	75.14	75.00	74.85	74.92	75.05	74.98	75.00	74.94	74.94	74.87	.....	.....
10	75.14	75.00	74.90	74.97	74.86	74.94	75.03	74.97	74.89	74.85	.....	.....
11	75.03	74.95	74.90	74.93	74.83	74.93	75.02	74.96	74.98	74.81	.....	.....
12	75.12	75.01	74.80	74.89	74.83	74.92	75.05	74.93	75.00	74.77	.....	.....
13	75.18	75.18	74.80	74.89	74.83	74.89	75.02	74.95	74.99	74.88	.....	.....
14	75.01	75.08	74.75	74.94	74.93	74.93	75.00	74.95	75.04	74.90	.....	.....
15	75.01	75.00	74.85	74.90	74.90	74.88	74.99	74.95	75.03	74.84	.....	.....
16	74.93	74.98	74.78	74.86	74.90	74.90	75.00	74.99	.....	74.92	.....	.....
17	75.01	74.93	74.76	74.90	74.82	74.88	75.01	75.00	.....	74.87	.....	.....
18	75.00	74.93	74.77	74.89	74.79	74.92	75.00	74.96	.....	74.92	.....	.....
19	75.02	74.84	74.91	74.97	74.81	74.90	74.97	74.97	.....	75.85	.....	.....
20	75.14	74.85	74.93	74.87	74.88	74.90	74.97	74.96	.....	.....	.....	.....
21	74.98	74.88	74.92	74.86	74.91	74.87	75.02	74.95	.....	.....	.....	.....
22	74.98	74.85	74.91	74.90	74.87	74.80	75.02	74.93	.....	.....	.....	.....
23	75.08	74.85	74.82	74.96	74.84	74.80	75.00	74.91	.....	.....	.....	.....
24	75.07	74.95	74.83	74.92	74.79	74.80	74.95	74.91	.....	.....	.....	.....
25	74.99	.....	74.88	74.95	74.82	74.70	74.94	74.92	.....	.....	.....	.....
26	74.91	.....	74.88	74.91	74.85	74.86	74.99	74.92	.....	.....	.....	74.68
27	75.10	.....	74.94	74.81	74.87	74.87	74.96	74.87	.....	.....	.....	.....
28	75.13	.....	74.91	74.83	74.82	75.02	74.95	74.91	74.98	.....	.....	.....
29	75.19	.....	74.88	74.98	74.79	.....	74.94	74.92	74.89	.....	.....	.....
30	75.03	.....	74.88	74.88	74.84	.....	74.98	74.95	74.90	.....	.....	.....
31	75.07	.....	74.90	.....	74.78	74.95	74.95	74.95	.....	.....	.....	.....

Cherry County

28-28-1cc. U. S. Geol. Survey. Jetted observation water-table well in sand of Pleistocene age, diameter  $\frac{3}{4}$  inch, depth 14 feet. Land-surface datum is 2,929.09 feet above msl. Highest water level 2.17 below lsd, Sept. 12, 1951; lowest 5.48 below lsd, Feb. 26, 1951. Records available: 1950-51. Feb. 26, 5.48; Mar. 31, 5.39; May 2, 4.76; June 8, 3.11; July 20, 2.39; Sept. 12, 2.17; Dec. 29, 3.19.

29-28-13aa. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 14 feet. Land-surface datum is 2,926.31 feet above msl. Highest water level 0.99 below lsd, June 8, 1951; lowest 4.50 below lsd, Nov. 2, 1949. Records available: 1949-51. Feb. 5, 3.99; Mar. 31, 3.57; May 2, 2.68; June 8, 0.99; July 20, 1.38; Sept. 12, 1.35; Dec. 29, 2.20.

30-28-1ad. U. S. Geol. Survey. Jetted observation water-table well in sand of Pleistocene age, diameter  $\frac{3}{4}$  inch, depth 10 feet. Land-surface datum is 2,878.14 feet above msl. Highest water level 2.74 below lsd, Sept. 12, 1951; lowest 4.12 below lsd, Jan. 27, Dec. 11, 1950. Records available: 1950-51. Feb. 5, 4.04; Mar. 31, 4.01; May 2, 3.95; June 8, 2.91; July 20, 3.16; Sept. 12, 2.74; Dec. 29, 3.02.

30-28-36aa. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Land-surface datum is 2,896.36 feet above msl. Highest water level 1.46 below lsd, June 8, 1951; lowest 3.76 below lsd, June 28, 1950. Records available: 1949-51. Feb. 5, 2.25; Mar. 31, 1.93; May 2, 2.13; June 8, 1.46; July 20, 2.40; Sept. 12, 1.98; Dec. 29, 2.29.

30-29-14ac. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 14 feet. Land-surface datum is 2,927.06 feet above msl. Highest water level 1.51 below lsd, Sept. 12, 1951; lowest 2.79 below lsd, Dec. 7, 1950. Records available: 1949-51. Feb. 5, 2.73; Mar. 31, 2.50; May 2, 2.38; June 8, 1.57; July 19, 2.05; Sept. 12, 1.51; Dec. 29, 1.89.

30-29-22bb. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Land-surface datum is 2,950.42 feet above msl. Highest water level 0.87 below lsd, May 10, 1950; lowest 3.93 below lsd, Oct. 28, 1949. Records available: 1949-51. Jan. 17, 2.97; Mar. 31, 2.58; May 2, 2.39; June 8, 0.89; July 23, 2.93; Sept. 12, 1.40; Dec. 29, 2.31.

30-30-34cd. U. S. Geol. Survey. Jetted observation water-table well in sand of Pleistocene age, diameter  $\frac{3}{4}$  inch, depth 21 feet. Land-surface datum is 3,048.61 feet above msl. Highest water level 7.55 below lsd, Nov. 7, 1950; lowest 7.91 below lsd, Mar. 31, 1951. Records available: 1950-51. Feb. 8, 7.90; Mar. 31, 7.91.

31-25-21bd. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 12 feet. Land-surface datum is 2,685.61 feet above msl. Highest water level 0.31 below lsd, Sept. 12, 1951; lowest 6.38 below lsd, Sept. 12, 1936. Records available: 1936-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	3.27	May 2	0.77	July 20	2.12	Sept. 28	1.44
Feb. 16	2.95	29	1.89	31	1.36	Oct. 31	1.25
26	2.65	June 12	1.35	Aug. 29	1.06	Nov. 30	1.02
Mar. 31	1.57	29	.95	Sept. 12	.31	Dec. 28	.61
Apr. 30	.78						

31-28-1ad. U. S. Geol. Survey. Jetted observation water-table well in sand of Pleistocene age, diameter  $\frac{3}{4}$  inch, depth 9 feet. Land-surface datum is 2,843.9 feet above msl. Highest water level 0.42 below lsd, May 9, 1950; lowest 3.41 below lsd, Feb. 5, 1951. Records available: 1950-51. Feb. 5, 3.41; Mar. 31, 2.66; May 2, 2.02; June 8, 0.55; July 19, 1.44; Sept. 12, 0.58; Dec. 29, 1.34.

31-28-31bb. U. S. Geol. Survey. Jetted observation water-table well in sand of Pleistocene age, diameter  $\frac{3}{4}$  inch, depth 11 feet. Land-surface datum is 2,886.86 feet above msl. Highest water level 0.41 above lsd, June 8, 1951; lowest 2.02 below lsd, Feb. 5, 1951. Records available: 1950-51. Feb. 5, -2.02; Mar. 31, -1.70; May 2, -1.24; June 8, +0.41; July 19, +0.11; Sept. 12, +0.38; Dec. 29, -0.21.

32-27-18cb. U. S. Geol. Survey. Jetted observation water-table well in sand of Pleistocene age, diameter  $\frac{3}{4}$  inch, depth 17 feet. Land-surface datum is 2,781.3 feet above msl. Highest water level 6.40 below lsd, Sept. 12, 1951; lowest 8.04 below lsd, May 2, 1951. Records available: 1950-51. Feb. 6, 7.72; Mar. 31, 7.76; May 2, 8.04; June 8, 7.34; July 19, 6.81; Sept. 12, 6.40; Dec. 29, 6.46.

33-27-17cb. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 9 feet. Land-surface datum is 2,408.92 feet above msl. Highest water level 1.52 below lsd, Dec. 29, 1951; lowest 3.38 below lsd, Aug. 9, 1937. Records available: 1936-48, 1950-51. Jan. 16, 1.61; May 2, 2.21; June 12, 2.21; July 26, 2.69; Sept. 12, 1.78; Dec. 29, 1.52.

34-27-31da. U. S. Geol. Survey. Formerly University of Nebraska. Drilled unused water-table well in sand of Pleistocene age, diameter 2 inches, depth 128 feet. Highest water level 97.92 below lsd, Oct. 7, 1947; lowest 100.39 below lsd, Oct. 19, 1941. Records available: 1934-41, 1944-47. No measurement made in 1951.

34-31-3ad. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 17 feet. Highest water level 1.25 below lsd, June 6, 1935; lowest 5.47 below lsd, Oct. 31, 1940. Records available: 1934-47. No measurement made in 1951.

34-36-1dc. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 21 feet. Highest water level 4.46 below lsd, June 6, 1935; lowest 9.54 below lsd, Oct. 1, 1941. Records available: 1934-45, 1947, 1951. Apr. 21, 7.75; July 30, 7.24; Oct. 3, 7.75.

34-38-14bc. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 17 feet. Highest water level 6.19 below lsd, Aug. 1, 1944; lowest 8.14 below lsd, Aug. 9, 1937. Records available: 1936-41, 1944-47, 1951. Apr. 21, 6.67; July 30, 5.36; Oct. 3, 6.46.

#### Cheyenne County

14-47-26cb. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 1 inch, depth 29 feet. Highest water level 18.32 below lsd, Mar. 28, 1951; lowest 20.82 below lsd, Nov. 9, 1940. Records available: 1940-42, 1944, 1947, 1950-51. Jan. 11, 18.80; Mar. 28, 18.32; May 22, 18.41; Aug. 8, 18.63; Nov. 19, 18.77.

14-48-27cc. Frank Partrey. Drilled irrigation water-table well in sand of Pleistocene age, diameter 20 inches, depth 110 feet. Highest water level 33.47 below lsd, Mar. 29, 1951; lowest 38.85 below lsd, June 24, 1950. Records available: 1950-51. Jan. 12, 33.69; Mar. 29, 33.47; Nov. 19, 34.67.

14-49-34bb. Harry Brewer. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 100 feet. Highest water level 24.27 below lsd, Mar. 29, 1951; lowest 25.57 below lsd, Aug. 8, 1951. Records available: 1950-51. Jan. 12, 24.32; Mar. 29, 24.27; May 22, 24.31; Aug. 8, 25.57; Nov. 19, 24.31.

14-50-35ac. F. C. Mather Estate. Drilled irrigation water-table well in alluvial gravel, diameter 24 inches, depth 91 feet. Highest water level 29.16 below lsd, July 18, 1935; lowest 36.08 below lsd, Jan. 12, 1951. Records available: 1934-40, 1942, 1944, 1947, 1950-51. Jan. 12, 36.08; Mar. 29, 31.07; May 22, 31.46; Aug. 8, 31.67; Nov. 19, 32.25.

14-52-5ca. William Goding. Drilled irrigation water-table well in sands of alluvium and joints in Brule formation, diameter 8 inches, depth 55 feet. Highest water level 26.64 below lsd, June 15, 1935; lowest 29.93 below lsd, Aug. 8, 1951. Records available: 1934-40, 1950-51. Jan. 12, 28.97; Mar. 29, 29.17; May 22, 29.46; Aug. 8, 29.93; Nov. 20, 28.92.

14-52-11ac. Earl Johnson. Drilled irrigation water-table well in Brule formation, diameter 18 in., depth 92 feet. Highest water level 27.80 below lsd, May 22, 1951; lowest 33.00 below lsd, June 24, 1950. Records available: 1950-51. Jan. 12, 29.64; Mar. 29, 28.37; May 22, 27.80; Nov. 20, 29.60.

#### Clay County

5-6-26bd. B. W. Merrill. Drilled unused water-table well in sand of Pleistocene age, diameter 4 inches, depth 86 feet. Highest water level 76.05 below lsd, June 7-8, 1950; lowest 77.09 below lsd, July 18, 1948. Records available: 1948-50. No measurement made in 1951.

#### Colfax County

A17-2-22dd. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 13 feet. Land-surface datum is 1,385.01 feet above msl. Highest water level 3.49 below lsd, May 3, 1951; lowest 6.49 below lsd, Jan. 13, 1948. Records available: 1946-51. Jan. 9, 5.91; Mar. 14, 5.23; May 3, 3.49; Aug. 14, 3.56; Oct. 31, 3.62.

A17-3-4cc. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 16 feet. Land-surface datum is 1,370.58 feet above msl. Highest water level 4.37 below lsd, Mar. 8, 1949; lowest 6.34 below lsd, Sept. 4, 1947. Records available: 1946-51. Jan. 9, 5.71; Mar. 14, 4.94; May 3, 4.38; Aug. 14, 5.31; Oct. 31, 5.27.

A17-3-23cc. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 11 feet. Land-surface datum is 1,347.03 feet above msl. Highest water level 2.15 below lsd, Mar. 24, 1948; lowest 5.27 below lsd, Sept. 3, 1946. Records available: 1946-51. Jan. 9, 4.57; Mar. 14, 3.72; May 3, 2.58; Aug. 14, 3.80; Oct. 31, 3.42.

A17-4-4bb. E. Maxes. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 36 feet. Land-surface datum is 1,340.15 feet above msl. Highest water level 11.19 below lsd, July 8, 1947; lowest 17.11 below lsd, Aug. 6, 1946. Records available: 1945-51. Jan. 9, 14.50; May 3, 13.11; Aug. 14, 11.41; Oct. 31, 11.98.

#### Cuming County

A21-6-23bb. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 1 inch, depth 23 feet. Highest water level 3.68 below lsd, Nov. 6, 1951; lowest 8.93 below lsd, Oct. 10, 1941. Records available: 1934-44, 1946, 1948, 1950-51. Jan. 16, 5.19; Mar. 8, 5.05; May 28, 4.44; Aug. 29, 5.21; Nov. 6, 3.68.

A22-6-4aa. Art Miller. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 52 feet. Highest water level 7.51 below lsd, Sept. 1, 1951; lowest 9.93 below lsd, Jan. 16, 1951. Records available: 1950-51. Jan. 16, 9.93; Mar. 8, 9.72; May 28, 8.55; Sept. 1, 7.51; Nov. 7, 8.18.

A22-6-34bd. City of West Point. Drilled unused water-table well in sand of Pleistocene age, diameter 18 inches, depth 42 feet. Highest water level 4.05 below lsd, Mar. 8, 1951; lowest 5.41 below lsd, May 28, 1951. Records available: 1950-51. Jan. 16, 4.58; Mar. 8, 4.05; May 28, 5.41.

A23-5-36bd. H. Albers. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 52 feet. Highest water level 8.28 below lsd, Aug. 29, 1951; lowest 10.71 below lsd, Jan. 16, 1951. Records available: 1950-51. Jan. 16, 10.71; Mar. 8, 10.34; May 28, 9.03; Aug. 29, 8.28; Nov. 7, 8.64.

A24-4-30ad. Harry Pumprey. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 42 feet. Highest water level 7.57 below lsd, Aug. 29, 1951; lowest 10.83 below lsd, Mar. 8, 1951. Records available: 1950-51. Jan. 16, 10.73; Mar. 8, 10.83; May 28, 8.38; Aug. 29, 7.57; Nov. 7, 8.80.

#### Custer County

13-21-36ca. Jack Lyons. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 123 feet. Highest water level 50.55 below lsd, May 30, 1951; lowest 51.90 below lsd, Sept. 7, 1950. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	51.55	Apr. 6	51.53	May 30	50.55	Aug. 28	51.57
29	51.71	30	51.46	Aug. 20	51.77	Dec. 12	51.40
Mar. 17	51.56						

16-23-35cb. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 29 feet. Highest water level 20.71 below lsd, Nov. 26, 1936; lowest 23.09 below lsd, Aug. 10, 1937. Records available: 1936-42, 1951. Apr. 2, 21.33; May 30, 20.99; Aug. 20, 21.1. Measurement discontinued.

17-25-27cc. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 15 feet. Highest water level 7.30 below lsd, May 30, 1951; lowest 10.22 below lsd, Aug. 10, 1937. Records available: 1936-42, 1951. Apr. 2, 8.17; May 30, 7.30; Aug. 20, 8.15. Measurement discontinued.

18-17-4ac. Ben Tvrlik. Drilled irrigation water-table well in gravel of Pleistocene age, diameter 32 inches, depth 108 feet. Land-surface datum is 2,274.18 feet above msl. Highest water level 12.05 below lsd, May 31, 1950; lowest 12.49 below lsd, Sept. 28, 1950. Records available: 1950-51. Sept. 24, 12.37.

19-17-9ca. R. E. Probert. Drilled irrigation water-table well in gravel of Pleistocene age, diameter 18 inches, depth 170 feet. Land-surface datum is 2,335.4 feet above msl. Highest water level 68.23 below lsd, Dec. 4, 1951; lowest 69.38 below lsd, Sept. 26, 1949. Records available: 1949-51. Mar. 13, 68.71; May 11, 68.80; Aug. 1, 68.55; Sept. 12, 68.54; Dec. 4, 68.23.

19-18-9aa. Leonard Owen. Driven observation water-table well in sand of Pleistocene age, diameter 1½ inches, depth 28 feet. Land-surface datum is 2,325.16 feet above msl. Highest water level 11.16 below lsd, Mar. 3, 1950; lowest 14.98 below lsd, July 16, 1940. Records available: 1934-42, 1945, 1948-51. Jan. 11, 11.71; Feb. 2, 11.82; Feb. 27, 11.88; Mar. 13, 11.96; May 11, 12.05; July 31, 11.57; Sept. 11, 11.48; Nov. 28, 11.51.

19-19-2bb. Ralph Slagel. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches. Land-surface datum is 2,361.95 feet above msl. Highest water level 15.56 below lsd, Sept. 11, 1951; lowest 17.56 below lsd, July 6, 1950. Records available: 1949-51. Jan. 11, 17.00; Sept. 11, 15.56.

19-20-1cd. Frank Wells. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches. Land-surface datum is 2,398.03 feet above msl. Highest water level 10.18 below lsd, May 22, 1951; lowest 12.88 below lsd, Sept. 7, 1949. Records available: 1949-51. Jan. 15, 11.99; Mar. 14, 11.95; May 22, 10.18; July 18, 10.96; Sept. 14, 10.87; Nov. 28, 11.34.

20-20-30aa. Ted Holmes. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 77 feet. Land-surface datum is 2,445.91 feet above msl. Highest water level 31.72 below lsd, Sept. 12, 1951; lowest 33.09 below lsd, Aug. 24, 1949. Records available: 1949-51. Sept. 12, 31.72.

20-21-10bc. A. C. Turner. Drilled domestic water-table well in sand and gravel of Pleistocene age, diameter 6 inches, depth 30 feet. Land-surface datum is 2,476.68 feet above msl. Highest water level 20.51 below lsd, Mar. 14, 1951; lowest 21.94 below lsd, Aug. 10, 1950. Records available: 1949-51. Jan. 15, 20.63; Mar. 14, 20.51; May 11, 20.83.

#### Dawes County

31-52-3dc. T. P. Moody. Drilled observation water-table well in sand and alluvium, diameter 8 inches, depth 39 feet. Highest water level 15.87 below lsd, May 30, 1948; lowest 21.51 below lsd, Aug. 27, 1934. Records available: 1934-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	18.49	May 2	18.34	July 25	18.10	Oct. 3	18.68
Mar. 22	18.43	31	18.19	Aug. 22	18.28	Nov. 2	18.28
Apr. 7	18.41	June 28	18.00	Sept. 18	18.61	Dec. 1	18.27
22	18.35						

#### Dawson County

9-20-13bc. J. P. Brick. Drilled irrigation water-table well in gravel and fine sand, diameter 18 inches, depth 43 feet. Land-surface datum is 2,328.22 feet above msl. Highest water level 6.90 below lsd, Dec. 3, 1946; lowest 13.32 below lsd, Oct. 16, 1937. Records available: 1930-51. Jan. 9, 9.34; Mar. 27, 9.03; May 7, 8.82; Aug. 2, 8.14; Oct. 25, 8.43.

9-21-24aa. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in gravel, diameter 1 inch, depth 11 feet. Land-surface datum is 2,358.88 feet above msl. Highest water level 2.05 below lsd, July 12, 1947; lowest 6.29 below lsd, Sept. 21, 1934. Records available: 1931-43, 1945-51. Jan. 9, 3.69; Mar. 27, 3.51; May 7, 3.28; Oct. 25, 3.06.

9-21-29bc. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in gravel of Pleistocene age, diameter 1½ inches, depth 10 feet. Land-surface datum is 2,382.23 feet above msl. Highest water level 0.10 below lsd, May 3, 1933; lowest 5.21 below lsd, Sept. 30, 1940. Records available: 1930-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 23, 1948	g2.63	May 5, 1949	g3.06	Apr. 22, 1950	g3.05	Mar. 27, 1951	3.04
Nov. 9	g3.16	June 1	g2.78	July 13	g3.56	May 8	2.96
Dec. 6	g2.99	July 7	g2.68	Sept. 21	g3.40	June 20	g3.04
Jan. 14, 1949	g2.81	Aug. 2	g3.71	Jan. 3, 1951	g3.04	Aug. 9	2.90
Feb. 7	g2.70	Sept. 1	g3.98	9	3.17	Oct. 1	g3.11
Mar. 9	g2.58	Oct. 1	g3.65	Mar. 19	g3.05	29	2.89
Apr. 7	g1.84	Dec. 28	g3.28				

g Measurements furnished by Central Nebraska Public Power and Irrigation District.

9-21-31da. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in gravel of Pleistocene age, diameter 1½ inches, depth 24 feet. Land-surface datum is 2,389.89 feet above msl. Highest water level 7.40 below lsd, Nov. 9, 1948; lowest 22.90 below lsd, July 24, 1940. Records available: 1930-51.

## 9-21-31da--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 23, 1948	g9.07	Apr. 7, 1949	g8.97	Dec. 28, 1949	g9.26	Mar. 27, 1951	8.77
Sept. 21	g11.02	May 6	g8.90	Apr. 22, 1950	g8.66	May 8	8.66
Nov. 9	g7.40	June 1	g8.31	July 13	g8.66	June 20	g8.58
Dec. 6	g10.07	July 7	g8.12	Sept. 21	g8.86	Aug. 9	8.42
Jan. 14, 1949	g9.74	Aug. 2	g14.30	Jan. 3, 1951	g8.87	Oct. 1	g8.50
Feb. 7	g9.58	Sept. 1	g11.20	9	9.01	30	8.60
Mar. 9	g9.31	Oct. 1	g9.50	Mar. 19	g8.87		

g Measurements furnished by Central Nebraska Public Power and Irrigation District.

9-22-33aa. C. J. Magnuson. Drilled unused water-table well in sand of Pleistocene age, diameter 3 inches, depth 88 feet. Land-surface datum is 2,508.69 feet above msl. Highest water level 29.16 below lsd, Oct. 25, 1951; lowest 34.56 below lsd, May 10, 1949. Records available: 1949-51. Jan. 24, 31.09; Mar. 16, 30.25; May 24, 30.24; Aug. 13, 29.64; Oct. 25, 29.16.

9-23-2dc. Leo Neil. Drilled irrigation water-table well in sand of Pleistocene age, diameter 24 inches, depth 53 feet. Land-surface datum is 2,464.22 feet above msl. Highest water level 14.05 below lsd, July 14, 1947; lowest 18.24 below lsd, Aug. 9, 1946. Records available: 1945-51. Jan. 13, 15.90; Mar. 30, 15.84; May 10, 15.80; Oct. 18, 15.31.

9-23-21bb. Oscar Weissert. Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 3 inches, depth 253 feet. Land-surface datum is 2,683.70 feet above msl. Highest water level 161.98 below lsd, Aug. 13, 1951; lowest 170.74 below lsd, May 11, 1949. Records available: 1949-51. Jan. 24, 165.14; Mar. 16, 164.12; May 24, 163.80; Aug. 13, 161.98; Oct. 18, 162.41.

10-20-35bb. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter 1½ inches, depth 26 feet. Land-surface datum is 2,358.5 feet above msl. Highest water level 14.80 below lsd, July 12, 1947; lowest 18.64 below lsd, Sept. 7, 1948. Records available: 1946-51. Jan. 9, 17.63; Mar. 27, 17.70; May 7, 17.72; Aug. 2, 16.00; Oct. 25, 16.05.

10-21-31da. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in gravel of Pleistocene age, diameter 1½ inches, depth 14 feet. Land-surface datum is 2,399.05 feet above msl. Highest water level 3.29 below lsd, June 12, 1935; lowest 9.27 below lsd, Sept. 21, 1934. Records available: 1930-51. Jan. 9, 7.01; Mar. 27, 6.93; May 7, 7.07; Aug. 9, 5.27; Oct. 29, 5.56.

10-22-29aa. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in gravel of Pleistocene age, diameter 1 inch, depth 12 feet. Land-surface datum is 2,435.14 feet above msl. Highest water level 1.52 below lsd, July 12, 1947; lowest 7.45 below lsd, Nov. 5, 1940. Records available: 1931-43, 1945-51. Jan. 10, 4.64; Mar. 27, 4.23; May 8, 4.22; Aug. 9, 2.84.

10-23-5bb. Vincent Ogorsolka. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 42 feet. Land-surface datum is 2,493.6 feet above msl. Highest water level 4.29 below lsd, Dec. 4, 1946; lowest 8.40 below lsd, July 11, 1946. Records available: 1945-51. Jan. 10, 7.97; Mar. 27, 7.98; May 8, 7.74; Aug. 8, 6.84; Oct. 17, 7.40.

10-23-29bb. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter 1½ inches, depth 13 feet. Land-surface datum is 2,480.3 feet above msl. Highest water level 2.02 below lsd, Oct. 9, 1946; lowest 7.70 below lsd, Nov. 5, 1948. Records available: 1946-51. Jan. 13, 6.66; Mar. 30, 6.27; May 10, 6.36; Aug. 8, 4.81.

10-24-7bb. F. C. McDowell. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 38 feet. Land-surface datum is 2,542.33 feet above msl. Highest water level 10.35 below lsd, Oct. 9, 1946; lowest 13.52 below lsd, July 12, 1946. Records available: 1946-51. Jan. 13, 12.18; Mar. 30, 11.64; May 10, 12.02; Aug. 8, 11.90; Oct. 17, 12.68.

11-19-4dd. William Reikertson. Formerly Vermas. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 163 feet. Land-surface datum is 2,373.23 feet above msl. Highest water level 54.18 below lsd, Nov. 2, 1950; lowest 56.20 below lsd, Aug. 20, 1951. Records available: 1948-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	54.84	Apr. 9	54.73	July 26	54.50	Aug. 28	55.48
29	54.97	30	54.60	Aug. 20	56.20	Dec. 12	54.80
Mar. 17	54.75	May 30	54.66				

11-21-31dd. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in gravel of Pleistocene age, diameter 1 inch, depth 57 feet. Land-surface datum is 2,464.41 feet above msl. Highest water level 22.77 below lsd, Sept. 8, 1947; lowest 33.28 below lsd, July 24, 1940. Records available: 1930-36, 1940-51. Jan. 9, 25.29; Mar. 27, 25.91; May 7, 26.02; Aug. 9, 29.77; Oct. 29, 24.68.

11-23-23cc. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 13 feet. Land-surface datum is 2,495.6 feet above msl. Highest water level 0.42 below lsd, Oct. 8, 1946; lowest 5.28 below lsd, Sept. 6, 1946. Records available: 1946-51. Jan. 10, 2.70; Mar. 27, 2.60; May 8, 3.36; Aug. 8, 4.02; Oct. 17, 3.67.

11-24-20ca. J. R. Owings. Drilled irrigation water-table well in fine sand and gravel of Pleistocene age, diameter 36 inches, depth 40 feet. Land-surface datum is 2,544.91 feet above msl. Highest water level 9.52 below lsd, July 12, 1947; lowest 14.97 below lsd, Sept. 22, 1934. Records available: 1932, 1934-42, 1944-51. Jan. 10, 12.08; Mar. 27, 11.81; May 8, 11.50; Oct. 17, 11.69.

11-25-21cc. E. D. Clark. Drilled irrigation water-table well in gravel and sand of Pleistocene age, diameter 16 inches, depth 28 feet. Land-surface datum is 2,571.19 feet above msl. Highest water level 4.18 below lsd, Nov. 17, 1931; lowest 13.40 below lsd, Aug. 10, 1931. Records available: 1930-42, 1944-51. Jan. 13, 9.13; Mar. 30, 9.82; May 9, 9.87; Oct. 17, 8.30.

12-25-34cc. John H. Block. Drilled irrigation water-table well in gravel and fine sand of Pleistocene age, diameter 24 inches, depth 65 feet. Land-surface datum is 2,611.72 feet above msl. Highest water level 26.80 below lsd, Aug. 8, 1951; lowest 30.40 below lsd, July 11, 1946. Records available: 1932, 1934-40, 1942, 1944-51. Jan. 10, 27.69; Mar. 27, 27.85; May 8, 27.92; Aug. 8, 26.80; Oct. 17, 27.26.

#### Deuel County

12-44-18bb. P. Nass. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 92 feet. Records available: 1950. No measurement made in 1951.

13-45-23cb. Albert Williams. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 23 feet. Highest water level 11.84 below lsd, Nov. 19, 1951; lowest 12.94 below lsd, June 20, 1950. Records available: 1950-51. Jan. 11, 12.90; Mar. 29, 12.18; May 22, 11.97; Aug. 8, 12.29; Nov. 19, 11.84.

14-46-33dc2. Formerly 13-46-3bb. Myron Carlson Ranches. Drilled unused water-table well in sand of Pleistocene age, diameter 6 inches, depth 31 feet. Highest water level 13.41 below lsd, May 22, 1951; lowest 14.14 below lsd, Mar. 29, 1951. Records available: 1950-51. Jan. 11, 14.01; Mar. 29, 14.14; May 22, 13.41; Aug. 8, 13.69; Nov. 19, 13.46.

#### Dodge County

A17-6-6aa. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 13 feet. Land-surface datum is 1,264.93 feet above msl. Highest water level 0.31 below lsd, May 3, 1951; lowest 4.72 below lsd, Oct. 22, 1940. Records available: 1936-42, 1944-51. Jan. 8, 2.44; Mar. 13, 1.42; May 3, 0.31; Nov. 6, 1.38.

A17-8-16ad. City of Fremont. Drilled observation water-table well in gravel of Pleistocene age, diameter 2 inches, depth 18 feet. Land-surface datum is 1,202.60 feet above msl. Highest water level 6.11 below lsd, June 22, 1945; lowest 14.19 below lsd, Oct. 22, 1940. Records available: 1940-51. Jan. 8, 9.62; Mar. 14, 9.90; May 3, 8.50; Aug. 15, 7.29; Nov. 6, 7.62.

A18-6-25cc. Owner unknown. Drilled irrigation water-table well in gravel of Pleistocene age, diameter 18 inches, depth 37 feet. Land-surface datum is 1,250.21 feet above msl. Highest water level 3.98 below lsd, May 3, 1951; lowest 10.50 below lsd, Nov. 1, 1948. Records available: 1947-51. Jan. 8, 9.04; Mar. 13, 8.24; May 3, 3.98; Aug. 14, 6.62; Nov. 6, 6.68.

A18-8-28da. City of Fremont. Drilled observation water-table well in gravel of Pleistocene age, diameter 2 inches, depth 85 feet. Land-surface datum is 1,262.76 feet above msl. Highest water level 60.86 below lsd, Oct. 8, 1941; lowest 68.72 below lsd, Mar. 20, 1940. Records available: 1940-51. Jan. 8, 64.29; Mar. 14, 64.39; May 3, 64.47; Aug. 15, 64.63; Nov. 6, 64.39.

A19-7-10cb. State of Nebraska. Drilled public-supply water-table well in gravel of Pleistocene age, diameter 12 inches, reported depth 60 feet. Highest water level 0.98 above lsd, Nov. 6, 1951; lowest 2.48 below lsd, Mar. 8, 1951. Records available: 1950-51. Mar. 8, 2.48; May 28, 2.37; Aug. 29, 0.74; Nov. 6, +0.98.

A19-8-34ba. B. Havekost. Drilled irrigation water-table well, diameter 18 inches, depth 133 feet. Highest water level 64.59 below lsd, Nov. 6, 1951; lowest 72.57 below lsd, Mar. 8, 1951. Records available: 1950-51. Jan. 16, 72.25; Mar. 8, 72.57; May 28, 71.83; Aug. 28, 71.80; Nov. 6, 64.59.

Dundy County

1-37-19ba. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter 1 $\frac{1}{4}$  inches, depth 18 feet. Land-surface datum is 2,990 feet above msl. Highest water level 7.12 below lsd, Apr. 5, 1949; lowest 14.47 below lsd, Oct. 24, 1950. Records available: 1946-51. May 3, 11.17; June 13, 10.14; July 16, 11.92; Aug. 22, 13.08; Oct. 4, 10.68; Dec. 21, 11.34.

1-37-31cd. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter 1 $\frac{1}{4}$  inches, depth 12 feet. Land-surface datum is 3,007 feet above msl. Highest water level 3.21 below lsd, Apr. 5, 1949; lowest 6.00 below lsd, Aug. 22, 1951. Records available: 1946-51. May 3, 4.80; June 13, 3.33; July 16, 4.15; Aug. 22, 6.00; Oct. 4, 3.98; Dec. 21, 4.81.

1-38-28da. Owner unknown. Drilled unused water-table well in sand of Pleistocene age, diameter 5 inches, depth 33 feet. Highest water level 18.86 below lsd, June 6, 1949; lowest 20.42 below lsd, Oct. 5, 1948. Records available: 1948-51. May 8, 19.90; June 19, 19.68; July 16, 19.58; Aug. 22, 19.08; Oct. 4, 18.95; Dec. 21, 20.20.

1-39-21ac. Louis Krutsinger. Drilled unused water-table well in gravel of Pleistocene age, diameter 6 inches, depth 15 feet. Land-surface datum is 3,096 feet above msl. Highest water level 4.13 below lsd, Dec. 21, 1951; lowest 6.23 below lsd, July 29, 1940. Records available: 1935-43, 1946-51. May 8, 5.00; June 13, 5.00; July 16, 5.20; Aug. 22, 5.10; Oct. 4, 5.16; Dec. 21, 4.13.

1-40-29bb. U. S. Geol. Survey. Drilled observation water-table well in silt and clay, diameter 8 inches, depth 21 feet. Land-surface datum is 3,207 feet above msl. Highest water level 10.12 below lsd, Aug. 22-23, 1950; lowest 12.65 below lsd, Oct. 23-24, 1947. Records available: 1946-51.

Daily lowest water level from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.04	11.13	11.15	11.20	11.17	.....	11.04	11.29	11.37	10.36	10.62	10.73
2	11.04	11.13	11.15	11.20	11.20	.....	11.04	11.30	11.38	10.37	10.63	10.73
3	11.04	11.13	11.15	11.20	11.20	.....	11.05	11.31	11.38	10.38	10.62	10.74
4	11.05	11.12	11.15	11.20	11.20	.....	11.05	11.32	11.35	10.43	10.62	10.74
5	11.06	11.12	11.15	11.20	11.20	.....	11.06	11.33	11.37	10.45	10.64	10.74
6	11.07	11.12	11.15	11.20	11.21	.....	11.07	11.35	11.06	10.46	10.65	10.74
7	11.07	11.14	11.15	11.21	11.21	.....	11.08	11.35	11.00	10.46	10.65	10.77
8	11.07	11.14	11.16	11.21	11.21	.....	11.09	11.35	10.85	10.46	10.65	10.78
9	11.07	11.13	11.16	11.21	11.20	.....	11.10	11.36	10.62	10.46	10.65	10.78
10	11.07	11.13	11.15	11.21	11.21	.....	11.11	11.38	10.52	10.46	10.66	10.78
11	11.07	11.13	11.17	11.21	11.21	.....	11.12	11.38	10.44	10.46	10.66	10.78
12	11.08	11.13	11.17	11.21	.....	.....	11.13	11.38	10.37	10.46	10.64	10.78
13	11.08	11.15	11.17	11.21	.....	11.80	11.14	11.35	10.35	10.48	10.65	10.78
14	11.08	11.15	11.15	11.20	.....	11.00	11.14	11.33	10.32	10.51	10.67	10.80
15	11.08	11.15	11.15	11.20	.....	11.00	11.14	11.31	10.30	10.51	10.69	10.81
16	11.08	11.12	11.15	11.20	.....	11.00	11.14	11.31	10.30	10.52	10.70	10.81
17	11.06	11.12	11.16	11.20	.....	11.00	11.15	11.30	10.29	10.53	10.71	10.80
18	11.08	11.12	11.18	11.18	.....	11.00	11.15	11.30	10.28	10.54	10.71	10.81
19	11.08	11.13	11.18	11.20	.....	11.00	11.15	11.30	10.27	10.55	10.69	10.81
20	11.10	11.14	11.18	11.20	.....	11.00	11.16	11.30	10.27	10.54	10.69	10.80
21	11.10	11.14	11.18	11.20	.....	11.00	11.18	11.31	10.30	10.53	10.69	10.82
22	11.09	11.14	11.18	11.21	.....	11.00	11.20	11.33	10.30	10.55	10.71	.....
23	11.10	11.15	11.18	11.21	.....	11.00	11.20	11.32	10.29	10.56	10.71	.....
24	11.11	11.15	11.18	11.20	.....	11.00	11.20	11.32	10.30	10.56	10.72	.....
25	11.10	11.15	11.19	11.20	.....	11.00	11.21	11.32	10.30	10.56	10.72	.....
26	11.10	11.14	11.19	11.20	.....	11.01	11.22	11.32	10.31	10.58	10.73	.....
27	11.11	11.14	11.17	11.20	.....	11.02	11.23	11.32	10.35	10.59	10.73	.....
28	11.12	11.14	11.20	11.20	11.03	.....	11.25	11.34	10.36	10.59	10.73	.....
29	11.13		11.20	11.20	11.03	.....	11.25	11.35	10.36	10.59	10.73	.....
30	11.13		11.20	11.17	11.04	.....	11.27	11.36	10.36	10.60	10.73	.....
31	11.13		11.20	.....			11.28	11.37	10.61	.....		

1-41-27ca. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 13 feet. Land-surface datum is 3,248 feet above msl. Highest water level 2.86 below lsd, Feb. 8, 1949; lowest 5.70 below lsd, Aug. 16, 1946. Records available: 1946-51. May 8, 4.17; June 13, 3.98; July 16, 4.62; Aug. 22, 4.58; Oct. 4, 5.03; Dec. 21, 3.14.

1-42-13bb. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 13 feet. Land-surface datum is 3,319 feet above msl. Highest water level 3.21 below lsd, Apr. 5, 1949; lowest 5.62 below lsd, Aug. 16, 1946. Records available: 1946-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17, 1950	3.84	July 12, 1950	4.91	Dec. 8, 1950	4.13	Aug. 22, 1951	4.10
Mar. 1	3.98	Aug. 10	4.75	May 8, 1951	4.11	Oct. 4	3.80
Apr. 21	4.00	Sept. 20	4.21	June 13	4.75	Dec. 21	3.60
June 2	4.37	Oct. 24	4.53	July 16	4.04		

1-42-36aa. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 17 feet. Land-surface datum is 3,293 feet above msl. Highest water level 9.37 below lsd, Aug. 10, 1950; lowest 11.62 below lsd, Feb. 8, 1949. Records available: 1946-51. May 8, 11.26; June 13, 10.72; July 16, 10.58; Aug. 22, 10.65; Oct. 4, 10.50; Dec. 21, 10.91.

2-36-31bc. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 28 feet. Land-surface datum is 2,917 feet above msl. Highest water level 19.18 below lsd, Dec. 21, 1951; lowest 22.84 below lsd, Oct. 6, 1948. Records available: 1946-51. Jan. 25, 21.00; May 3, 20.97; June 13, 20.10; July 16, 20.06; Aug. 22, 20.23; Sept. 28, 19.32; Dec. 21, 19.18.

#### Franklin County

1-13-2bc. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 18 feet. Land-surface datum is 1,759.78 feet above msl. Highest water level 5.94 below lsd, June 22, 1949; lowest 9.56 below lsd, Oct. 8, 1948. Records available: 1946-51. May 26, 7.71; July 2, 6.93; July 26, 6.37; Aug. 28, 7.41; Oct. 3, 7.44.

1-14-7bb1. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 20 feet. Land-surface datum is 1,805.68 feet above msl. Highest water level 0.07 below lsd, May 23, 1949; lowest 5.40 below lsd, Nov. 13, 1940. Records available: 1940-42, 1946-51. May 26, 0.43; July 2, 0.52; July 26, 0.31; Aug. 31, 2.66; Oct. 11, 2.14.

1-16-14ab. C. Howell. Drilled irrigation water-table well in sand of Pleistocene age, diameter 24 inches, depth 80 feet. Land-surface datum is 1,886.95 feet above msl. Highest water level 37.40 below lsd, Oct. 26, 1946; lowest 42.41 below lsd, Aug. 13, 1946. Records available: 1946-51. May 26, 39.33; July 3, 38.38; July 27, 37.87; Aug. 30, 38.90; Oct. 11, 38.71.

2-14-34ad. State of Nebraska. Drilled unused water-table well in sand of Pleistocene age, diameter 48 inches, depth 121 feet. Land-surface datum is 1,895.01 feet above msl. Highest water level 48.23 below lsd, Oct. 20, 1949; lowest 51.10 below lsd, Aug. 5, 1948. Records available: 1947-51. May 26, 50.06; July 2, 50.05; July 26, 50.05; Aug. 29, 50.07; Oct. 3, 49.99.

4-14-10da. Gilgen Bros. Drilled irrigation water-table well in gravel of Pleistocene age, diameter 12 inches, depth 225 feet. Highest water level 165.82 below lsd, June 30, 1938; lowest 168.86 below lsd, Aug. 12, 1947. Records available: 1935-40, 1942, 1947-49. No measurement made in 1951.

#### Furnas County

3-21-12dc. U. S. Geol. Survey. Driven observation water-table well in sand, diameter  $1\frac{1}{4}$  inches, depth 13 feet. Land-surface datum is 2,053 feet above msl. Highest water level 3.40 below lsd, Oct. 25, 1946; lowest 6.70 below lsd, Oct. 9, 1947. Records available: 1946-51. Apr. 17, 5.74; May 16, 5.08; June 18, 4.51; Oct. 8, 4.96.

3-22-2ba. U. S. Geol. Survey. Drilled observation water-table well in silt and fine sand, diameter  $1\frac{1}{4}$  inches, depth 14 feet. Land-surface datum is 2,116 feet above msl. Highest water level 4.78 below lsd, July 28, 1947; lowest 9.00 below lsd, Dec. 12, 1950. Records available: 1946-51. Apr. 11, 8.64; May 16, 8.74; June 20, 8.51; Oct. 9, 8.41.

3-25-4bb. U. S. Geol. Survey. Drilled observation water-table well in silt and sand, diameter 8 inches, depth 22 feet. Land-surface datum is 2, 258 feet above msl. Highest water level 3.62 below lsd, June 20-22, 1949; lowest 7.37 below lsd, Oct. 3, 1946. Records available: 1946-50. No measurement made in 1951.

4-22-29ad. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 23 feet. Land-surface datum is 2, 134 feet above msl. Highest water level 13.64 below lsd, July 31, 1947; lowest 17.60 below lsd, Aug. 13, 1946. Records available: 1946-51. Jan. 25, 15.97; Apr. 11, 15.84; May 15, 15.83; June 19, 15.43; July 31, 14.49; Oct. 8, 14.60.

4-23-23bd. O. V. Moore. Drilled stock water-table well in sand of Pleistocene age, diameter 6 inches, depth 43 feet. Highest water level 28.42 below lsd, June 10, 1949; lowest 30.89 below lsd, Sept. 13, 1943. Records available: 1936-44, 1946-51. June 19, 29.45; July 31, 29.50; Oct. 8, 29.58.

4-23-30cc. Bremer Bros. Drilled irrigation water-table well in sand of Pleistocene age, diameter 24 inches, depth 93 feet. Highest water level 51.84 below lsd, June 5, 1947; lowest 54.69 below lsd, Aug. 2, 1948. Records available: 1946-51. Apr. 11, 53.10; May 16, 52.92; June 20, 53.13; Oct. 9, 53.03.

4-24-15cc. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 23 feet. Highest water level 10.82 below lsd, July 31, 1947; lowest 14.20 below lsd, Aug. 14, 1946. Records available: 1946-51. Apr. 11, 12.49; May 15, 11.99; May 31, 11.72; June 19, 11.47; July 31, 11.58.

#### Garden County

17-44-22cc. Dr. G. H. Morris. Drilled unused water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 34 feet. Highest water level 20.83 below lsd, Oct. 25, 1935; lowest 27.57 below lsd, Oct. 18, 1950. Records available: 1935-42, 1944-46, 1948-51. Feb. 21, 26.89; Apr. 18, 27.23; Sept. 7, 26.65.

18-46-27cc. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand and gravel of Pleistocene age, diameter 1 inch, depth 17 feet. Highest water level 1.94 below lsd, Sept. 7, 1951; lowest 5.95 below lsd, July 26, 1940. Records available: 1934-42, 1944, 1946, 1948-51. Feb. 21, 4.45; Apr. 18, 4.44; Sept. 7, 1.94.

21-44-35ca. Crescent Lake Migratory Bird Refuge. Drilled observation water-table well in fine sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 8 feet. Highest water level 0.43 below lsd, Feb. 12, 1934; lowest 5.74 below lsd, Mar. 17, 1938. Records available: 1933-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	3.60	Apr. 20	2.30	June 29	3.00	Sept. 14	2.70
12	3.60	27	2.30	July 5	3.00	26	2.10
19	3.10	May 4	2.40	19	3.10	Oct. 5	2.70
22	2.80	11	3.00	27	3.10	19	2.60
26	2.80	17	3.10	Aug. 3	3.10	26	2.60
Mar. 2	2.40	25	2.70	9	3.00	Nov. 16	2.60
9	2.50	31	2.00	20	3.00	23	2.40
16	2.50	June 10	2.50	24	3.10	Dec. 3	2.00
23	2.50	15	2.71	Sept. 3	1.70	14	1.90
30	2.50	26	2.80	9	1.70	26	2.20
Apr. 13	2.50						

21-45-3bd2. Crescent Lake Migratory Bird Refuge. Drilled observation water-table well in fine sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 10 feet. Land-surface datum is 3,850.97 feet above msl. Highest water level 1.90 below lsd, June 17, 1949; lowest 7.82 below lsd, Nov. 30, 1938. Records available: 1934-51.

Jan. 5	4.10	Apr. 20	4.00	July 19	3.90	Sept. 27	3.30
12	4.10	27	4.00	27	4.52	Oct. 5	3.30
19	4.10	May 4	4.60	Aug. 3	3.90	19	3.30
28	4.10	17	4.80	9	3.90	26	3.30
Mar. 2	4.00	28	4.40	20	3.90	Nov. 16	3.28
9	4.00	31	4.40	24	4.00	23	3.28
16	4.00	June 11	3.59	Sept. 4	3.90	Dec. 3	3.10
23	4.00	26	3.59	9	3.40	14	3.30
30	4.00	29	3.69	14	3.50	26	3.30
Apr. 13	4.00	July 5	3.70				

Garfield County

21-16-14cb. Frank Smolik. Drilled irrigation water-table well in gravel of Pleistocene age, diameter 18 inches, depth 154 feet. Highest water level 23.82 below lsd, Oct. 24, 1950; lowest 24.81 below lsd, Mar. 7, 1951. Records available: 1950-51. Oct. 24, 1950, 23.82; 1951: Jan. 5, 24.55; Mar. 7, 24.81; Apr. 26, 24.59; July 10, 23.93; Sept. 24, 23.84; Nov. 29, 24.71.

24-15-20aa. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in fine sand of Pleistocene age, diameter 1 inch, depth 17 feet. Highest water level 1.80 below lsd, May 29, 1936; lowest 5.70 below lsd, July 17, 1940. Records available: 1935-36, 1938-42. No measurement made in 1951.

Date	Water level						
Nov. 22, 1935	4.83	May 29, 1936	1.80	June 2, 1939	4.44	Oct. 29, 1940	5.51
Dec. 22	4.69	July 15	4.49	Nov. 27	5.48	Oct. 16, 1941	5.02
Jan. 11, 1936	4.59	July 12, 1938	4.08	Mar. 26, 1940	5.57	Nov. 11, 1942	3.87
Mar. 23	2.95	Oct. 20	5.20	July 17	5.70		

Gosper County

6-21-29cc. Forrester. Drilled unused water-table well in sand of Pleistocene age, diameter 4 inches, depth 136 feet. Land-surface datum is 2,401.25 feet above msl. Highest water level 114.78 below lsd, Oct. 18, 1951; lowest 123.72 below lsd, Oct. 18, 1948. Records available: 1948-51. Jan. 24, 122.07; Mar. 16, 122.12; May 24, 121.69; Aug. 14, 121.55; Oct. 18, 114.78.

7-21-8bc. Andy Larson Estate. Drilled unused water-table well in Ogallala formation, diameter 4 inches, depth 132 feet. Land-surface datum is 2,466.95 feet above msl. Highest water level 102.50 below lsd, Aug. 15, 1951; lowest 117.80 below lsd, Sept. 26, 1935. Records available: 1934-40, 1948-51. Jan. 24, 103.88; Mar. 16, 103.08; May 24, 102.79; Aug. 15, 102.50; Oct. 24, 104.68.

7-21-15bb. Sophia Swartz. Drilled unused water-table well in sand of Pleistocene age, diameter 3 inches, depth 221 feet. Highest water level 191.86 below lsd, Oct. 24, 1951; lowest 199.49 below lsd, Mar. 20, 1950. Records available: 1950-51. Jan. 24, 197.41; Mar. 16, 196.30; May 24, 196.46; Oct. 24, 191.86.

7-22-8bb. Owner unknown. Drilled unused water-table well in sand of Pleistocene age, diameter 3 inches, depth 284feet. Land-surface datum is 2,638.44 feet above msl. Highest water level 234.93 below lsd, Aug. 14, 1951; lowest 251.65 below lsd, Nov. 25, 1947. Records available: 1947-51. Jan. 24, 236.79; Mar. 16, 235.54; May 24, 235.27; Aug. 14, 234.93; Oct. 24, 238.59.

'8-21-3dc. Jeffrey Bros. Drilled irrigation water-table well in sand of Pleistocene age, diameter 24 inches, depth 58 feet. Land-surface datum is 2,378 feet above msl. Highest water level 11.10 below lsd, July 14, 1947; lowest 14.50 below lsd, Sept. 10, 1947. Records available: 1946-51. Jan. 13, 13.68; Mar. 30, 13.77; May 10, 13.18; Aug. 8, 11.29; Oct. 24, 11.88.

Grant County

24-36-30bb. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in fine sand, diameter 1 inch, depth 15 feet. Highest water level 3.59 below lsd, June 8, 1935; lowest 6.62 below lsd, July 22, 1940. Records available: 1934-42, 1946-51. Feb. 19, 4.65; Apr. 17, 4.51; Sept. 4, 4.30.

24-40-36bb. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in fine sand, diameter 1 inch, depth 21 feet. Highest water level 12.32 below lsd, June 8, 1935; lowest 14.26 below lsd, Oct. 19, 1948. Records available: 1934-42, 1944-51. Feb. 19, 13.21; Apr. 17, 14.19.

Greeley County

17-10-10cb. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in alluvium, diameter 4 inches, depth 20 feet. Highest water level 13.11 below lsd, Aug. 21, 1950; lowest 17.17 below lsd, Oct. 31, 1942. Records available: 1935-42, 1949-51. Feb. 19, 13.70; May 8, 13.65. Measurement discontinued.

17-12-6dc. Wilber Fuss. Drilled irrigation water-table well in gravel of Pleistocene age, diameter 18 inches, depth 92 feet. Highest water level 12.41 below lsd, Apr. 28, 1949; lowest 13.76 below lsd, Feb. 27, 1950. Records available: 1948-51. Jan. 5, 13.26.

17-12-9bb. E. E. Williams. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 33 feet. Highest water level 16.45 below lsd, July 13, 1950; lowest 22.22 below lsd, Nov. 29, 1949. Records available: 1948-51. Jan. 5, 18.60; Mar. 7, 18.24; Apr. 26, 17.60; Nov. 29, 17.90.

20-9-20db. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in loess, diameter 3 inches, depth 19 feet. Highest water level 6.85 below lsd, July 24, 1950; lowest 9.37 below lsd, Nov. 27, 1939. Records available: 1937-41, 1948-51. Feb. 19, 8.47; May 8, 7.54.

20-10-14ab. Albert Glaser. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 90 feet. Highest water level 7.85 below lsd, July 24, 1950; lowest 11.88 below lsd, Aug. 4, 1949. Records available: 1948-51. Feb. 19, 9.67.

#### Hall County

9-10-4dc. L. C. Hilsbeck. Drilled unused water-table well in silt and sand, diameter 24 inches, depth 25 feet. Land-surface datum is 1,908.13 feet above msl. Highest water level 9.91 below lsd, Mar. 30, 1951; lowest 6.87 below lsd, Sept. 7, 1946. Records available: 1946-51. Jan. 13, 4.83; Mar. 30, 2.91; May 3, 3.09; Nov. 5, 4.94.

9-11-21bb. U. S. Geol. Survey. Driven observation water-table well in sand, diameter  $1\frac{1}{4}$  inches, depth 15 feet. Land-surface datum is 1,957.8 feet above msl. Highest water level 6.86 below lsd, May 11, 1950; lowest 9.52 below lsd, Sept. 7, 1946. Records available: 1946-51. Jan. 13, 7.72; Mar. 30, 7.20; May 3, 7.12; July 26, 7.69; Nov. 5, 7.64.

9-12-9ba. E. F. Ohlman. Drilled irrigation water-table well in gravel and sand of Pleistocene age, diameter 24 inches, depth 63 feet. Land-surface datum is 2,002.28 feet above msl. Highest water level 18.50 below lsd, July 5, 1949; lowest 23.35 below lsd, Sept. 6-12, 1946. Records available: 1930-51. Jan. 8, 20.59; Mar. 26, 20.55; May 4, 20.12; July 25, 19.34; Nov. 5, 20.09.

10-9-28cc. Owner unknown. Drilled irrigation water-table well in sand of Pleistocene age, diameter 22 inches, depth 90 feet. Land-surface datum is 1,886.9 feet above msl. Highest water level 12.93 below lsd, July 8, 1949; lowest 15.32 below lsd, Sept. 3, 1946. Records available: 1946-51. Jan. 13, 13.47; Mar. 30, 13.26; May 3, 13.09; July 26, 13.41; Nov. 5, 13.56.

10-11-15dc. W. A. Bouton. Drilled irrigation water-table well in gravel and sand of Pleistocene age, diameter 24 inches, depth 53 feet. Land-surface datum is 1,944.0 feet above msl. Highest water level 15.20 below lsd, July 5, 1949; lowest 21.12 below lsd, Sept. 5, 1946. Records available: 1930-51. Jan. 8, 18.03; Mar. 26, 18.17; May 3, 17.98; Nov. 5, 18.51.

10-11-30bc. J. M. Weldon. Drilled irrigation water-table well in sand and gravel, diameter 24 inches, depth 65 feet. Land-surface datum is 1,969.1 feet above msl. Highest water level 15.67 below lsd, June 23, 30, 1931; lowest 23.92 below lsd, Aug. 18, 1944. Records available: 1930-51. Jan. 8, 18.49; Mar. 26, 18.62; May 4, 18.66; Nov. 5, 18.84.

11-9-27bc. City of Grand Island. Drilled observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches. Highest water level 6.00 below lsd, July 10, 1947; lowest 10.70 below lsd, Feb. 26, 1944. Records available: 1942-51. Jan. 13, 9.85; Mar. 30, 10.47; May 3, 8.97; July 26, 9.10; Nov. 7, 9.83.

11-10-16bb. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 19 feet. Land-surface datum is 1,892.50 feet above msl. Highest water level 8.01 below lsd, July 24, 1951; lowest 11.07 below lsd, May 8, 1946. Records available: 1946-51. Jan. 8, 8.73; Mar. 26, 8.88; May 2, 8.56; July 24, 8.01; Nov. 5, 8.15.

11-11-25cc. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter 8 inches, depth 37 feet. Land-surface datum is 1,922.4 feet above msl. Highest water level 12.18 below lsd, June 25, 1949; lowest 17.10 below lsd, Oct. 4, 1946. Records available: 1946-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.35	14.41	14.49	14.52	14.47	14.39	14.25	14.19	14.67	14.57	14.61	14.64
2	14.35	14.40	14.45	.....	14.48	14.40	14.24	14.19	14.68	14.55	14.61	14.63
3	14.35	14.41	14.45	.....	14.50	14.40	14.24	14.19	14.68	14.54	14.59	14.62
4	14.38	14.40	14.51	14.50	14.50	14.39	14.25	14.20	14.68	14.56	14.61	14.62
5	14.39	14.41	14.48	14.50	14.49	14.37	14.24	14.21	14.68	14.58	14.64	14.61

## 11-11-25cc--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	14.40	14.45	14.48	14.50	14.50	14.35	14.23	14.25	14.67	14.59	14.64	14.61
7	14.40	14.44	14.51	14.50	14.50	14.33	14.23	14.27	14.67	14.60	14.64	14.69
8	14.39	14.42	14.52	14.49	14.47	14.32	14.22	14.30	14.66	14.61	14.63	14.69
9	14.35	14.40	14.51	14.50	14.45	14.32	14.22	14.35	14.63	14.60	14.61	14.69
10	14.36	14.40	14.50	14.50	14.46	14.32	14.23	14.42	14.63	14.58	14.61	14.69
11	14.37	14.43	14.52	14.52	14.46	14.31	14.24	14.46	14.60	14.57	14.62	14.66
12	14.37	14.46	14.53	14.51	14.45	14.30	14.25	14.48	14.61	14.56	14.59	14.66
13	14.38	14.47	14.50	14.49	14.44	14.30	14.25	14.52	14.62	14.57	14.60	14.66
14	14.37	14.45	14.50	14.49	14.45	14.29	14.25	14.52	14.63	14.57	14.64	14.70
15	14.37	14.43	14.50	14.51	14.45	14.29	14.23	14.57	14.63	14.57	14.66	
16	14.35	14.42	14.48	14.51	14.46	14.27	14.22	14.59	14.63	14.57	14.66	14.70
17	14.35	14.42	14.48	14.47	14.45	14.27	14.21	14.60	14.60	14.58	14.66	14.68
18	14.35	14.42	14.52	14.47	14.44	14.28	14.20	14.61	14.60	14.59	14.65	14.65
19	14.35	14.42	14.53	14.50	14.44	14.27	14.20	14.62	14.58	14.60	14.64	14.65
20	14.38	14.45	14.53	14.50	14.45	14.27	14.19	14.62	14.57	14.57	14.63	14.65
21	14.37	14.46	14.51	14.50	14.44	14.26	14.19	14.63	14.58	14.56	14.61	14.66
22	14.35	14.47	14.48	14.53	14.45	14.26	14.20	14.63	14.58	14.62	14.67	
23	14.36	14.47	14.48	14.50	14.45	14.26	14.20	14.64	14.57	14.59	14.64	14.70
24	14.39	14.45	14.53	14.49	14.42	14.27	14.20	14.65	14.57	14.59	14.64	14.70
25	14.40	14.45	14.53	14.49	14.40	14.26	14.18	14.65	14.58	14.57	14.64	14.71
26	14.36	14.45	14.49	14.51	14.42	14.25	14.17	14.66	14.56	14.59	14.65	14.72
27	14.39	14.46	14.48	14.50	14.42	14.26	14.16	14.66	14.60	14.60	14.65	14.72
28	14.43	14.45	14.49	14.48	14.41	14.26	14.16	14.66	14.60	14.59	14.64	14.65
29	14.44		14.53	14.47	14.40	14.25	14.17	14.66	14.58	14.57	14.64	14.65
30	14.43		14.52	14.47	14.40	14.25	14.19	14.67	14.57	14.59	14.64	14.65
31	14.42		14.52		14.39		14.19	14.67		14.61		14.69

11-11-32cb. Frank Hughes. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 65 feet. Land-surface datum is 1,960.0 feet above msl. Highest water level 29.04 below lsd, May 20, 1931; lowest 36.80 below lsd, Sept. 3, 1948. Records available: 1930-41, 1943-51. Jan. 8, 34.47; Mar. 26, 33.84; May 3, 34.09; Oct. 17, 34.36.

11-11-36cb. C. B. Modesitt. Formerly E. Batie. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 96 inches, depth 71 feet. Land-surface datum is 1,929.0 feet above msl. Highest water level 19.90 below lsd, July 5, 1949; lowest 26.07 below lsd, Sept. 4, 1946. Records available: 1930-40, 1943-51. Jan. 8, 21.35; Mar. 26, 21.39; May 3, 21.40; July 25, 21.06; Oct. 17, 21.63.

12-9-32aa2. Hall County Farm. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 92 feet. Land-surface datum is 1,859.8 feet above msl. Highest water level 9.72 below lsd, July 5, 1949; lowest 13.35 below lsd, Sept. 4, 1946. Records available: 1946-51. Jan. 8, 11.38; Mar. 26, 11.22; May 2, 10.74; July 24, 9.92; Nov. 7, 11.03.

12-11-24cd. U. S. Geol. Survey. Drilled observation water-table well in clay and fine sand, diameter 1½ inches, depth 17 feet. Land-surface datum is 1,900.80 feet above msl. Highest water level 3.54 below lsd, July 5, 1949; lowest 12.26 below lsd, Oct. 4, 1946. Records available: 1946-51. Jan. 8, 7.76; Mar. 26, 7.80; May 2, 6.81; July 24, 5.42; Oct. 18, 6.83.

Hamilton County

9-6-34bb. Tom Wild. Drilled irrigation water-table well in sand of Pleistocene age, diameter 24 inches, depth 87 feet. Highest water level 38.40 below lsd, Apr. 29, 1949; lowest 44.29 below lsd, Nov. 14, 1940. Records available: 1934-42, 1946-49. No measurement made in 1951.

9-8-9dc. Robert Phillips. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 5 inches, depth 67 feet. Land-surface datum is 1,848.58 feet above msl. Highest water level 54.38 below lsd, Oct. 30, 1935; lowest 58.40 below lsd, Dec. 31, 1946. Records available: 1934-42, 1944, 1946, 1948-50. Mar. 17, 1950, 56.55. No measurement made in 1951.

10-7-5bb. Owner unknown. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, Land-surface datum is 1,864.05 feet above msl. Records available: 1949. July 1, 1949, 85.83. No measurement made in 1951.

11-6-13cb. O. S. Swedberg. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 193 feet. Highest water level 90.30 below lsd, Jan. 24, 1935; lowest 94.23 below lsd, Jan. 21, 1941. Records available: 1934-42, 1944, 1946-51. Apr. 16, 92.42; May 21, 92.47; Oct. 9, 92.80; Dec. 28, 92.34.

11-8-28bc. H. J. Rathje. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 90 feet. Land-surface datum is 1,844.74 feet above msl. Highest water level 29.42 below lsd, July 8, 1949; lowest 32.23 below lsd, Sept. 3, 1946. Records available: 1946-51. Jan. 13, 29.57; Mar. 30, 29.66; May 3, 29.68; Oct. 25, 29.76; Oct. 30, 29.73.

12-7-21dc. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 15 feet. Land-surface datum is 1,776.25 feet above msl. Highest water level 7.64 below lsd, June 14, 1949; lowest 12.02 below lsd, Mar. 26, 1951. Records available: 1949-51. Jan. 8, 11.64; Mar. 26, 12.02; May 1, 11.71; July 26, 10.15; Oct. 30, 9.47.

13-6-27cc. Harry G. Lock. Drilled irrigation water-table well in gravel of Pleistocene age, diameter 23 inches, depth 42 feet. Land-surface datum is 1,714.94 feet above msl. Highest water level 7.72 below lsd, Mar. 7, 1949; lowest 11.41 below lsd, Nov. 14, 1940. Records available: 1935-40, 1942, 1944, 1946-51. Jan. 8, 9.09; Mar. 13, 8.79; May 2, 8.45; Aug. 22, 8.83; Nov. 6, 8.98.

14-5-35aa. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 11 feet. Land-surface datum is 1,643.67 feet above msl. Highest water level 2.71 below lsd, May 2, 1951; lowest 3.82 below lsd, June 28, 1950. Records available: 1949-51. Jan. 8, 2.99; Mar. 13, 2.79; May 2, 2.71; Aug. 22, 3.48; Oct. 30, 2.93; Nov. 6, 2.91.

#### Harlan County

1-17-1da. U. S. Geol. Survey. Drilled observation water-table well in silt and soil of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 14 feet. Land-surface datum is 1,878.45 feet above msl. Highest water level 1.95 below lsd, Oct. 25, 1946; lowest 8.00 below lsd, Oct. 7, 1948. Records available: 1946-51. Aug. 29, 5.35; Oct. 11, 5.03.

2-18-33cd. C. A. Feese. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 4 feet, depth 27 feet. Highest water level 5.68 below lsd, Aug. 1, 1947; lowest 14.42 below lsd, Sept. 27, 1934. Records available: 1934-42, 1944, 1946-51. Apr. 18, 11.90; May 17, 11.72; June 20, 8.65; Oct. 9, 9.02.

2-19-28dd. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 1 inch, depth 22 feet. Highest water level 6.59 below lsd, June 11, 1949; lowest 10.74 below lsd, Nov. 12, 1940. Records available: 1940-41, 1946-51. Apr. 18, 9.13; May 17, 9.21; June 20, 7.53; Oct. 9, 7.56.

3-20-25cc. U. S. Geol. Survey. Drilled observation water-table well in silt and clay of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 2,024 feet above msl. Highest water level 10.22 below lsd, Aug. 1, 1947; lowest 16.16 below lsd, Aug. 13, 1946. Records available: 1946-51. Apr. 18, 14.24; May 16, 14.69; June 19, 14.56; Oct. 9, 14.02.

#### Hayes County

5-33-31dc. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 1 inch, depth 23 feet. Highest water level 6.64 below lsd, Apr. 9, 1937; lowest 14.82 below lsd, Oct. 8, 1947. Records available: 1936-44, 1946-51. Jan. 25, 14.27; May 9, 14.10; June 7, 13.36; July 5, 13.23; Aug. 21, 14.08; Oct. 8, 13.35; Dec. 27, 13.34.

5-34-30ba. U. S. Geol. Survey. Drilled observation water-table well in silt and fine sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 17 feet. Highest water level 9.63 below lsd, Feb. 8, 1949; lowest 11.84 below lsd, Dec. 6, 1950. Records available: 1946-51. May 9, 11.55; June 7, 11.15; July 5, 11.63; Aug. 21, 11.35; Oct. 8, 11.50; Dec. 27, 11.42.

5-35-16dd. U. S. Geol. Survey. Drilled observation water-table well in silt and fine sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 13 feet. Highest water level 6.83 below lsd, Feb. 8, 1949; lowest 9.74 below lsd, Dec. 7, 1950. Records available: 1946-51. May 9, 9.08; June 7, 9.09; July 5, 9.64; Aug. 21, 9.35; Oct. 8, 9.49; Dec. 27, 9.26.

Hitchcock County

2-33-6cb. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 16 feet. Highest water level 7.69 below lsd, Apr. 4, 1949; lowest 11.32 below lsd, Oct. 6, 1948. Records available: 1946-51. May 3, 9.36; June 20, 9.27; July 13, 9.56; Oct. 8, 10.00.

2-35-21bc. Rev. Otto Brownfield. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 16 inches, depth 47 feet. Land-surface datum is 2,831.0 feet above msl. Highest water level 19.40 below lsd, June 13, 1951; lowest 21.73 below lsd, Sept. 24, 1934. Records available: 1934-41, 1946-51. May 3, 20.20; June 13, 19.40; July 16, 19.41; Aug. 22, 20.40; Sept. 28, 19.65; Dec. 21, 19.60.

2-35-24aa. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Land-surface datum is 2,779.0 feet above msl. Highest water level 3.67 below lsd, June 9, 1949; lowest 8.77 below lsd, Oct. 8, 1947. Records available: 1946-51. June 11, 6.15.

3-31-14bc. U. S. Geol. Survey. Drilled observation water-table well in silt of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 26 feet. Land-surface datum is 2,569.0 feet above msl. Highest water level 11.82 below lsd, Oct. 8, 1947; lowest 15.88 below lsd, Aug. 15, 1946. Records available: 1946-51. May 7, 14.58; June 7, 14.40; July 5, 14.60; Aug. 21, 14.02; Oct. 8, 13.96; Dec. 27, 14.38.

3-32-11bb. U. S. Geol. Survey. Drilled observation water-table well in silt and fine sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 18 feet. Highest water level 12.65 below lsd, Feb. 8, 1949; lowest 14.16 below lsd, July 10, 1950. Records available: 1946-51. May 9, 13.97; June 7, 13.61; July 5, 13.45; Aug. 21, 13.25; Oct. 8, 13.95; Dec. 27, 13.86.

3-32-26dd. Ernst Meintz. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 84 feet. Highest water level 26.77 below lsd, Aug. 16, 1951; lowest 29.92 below lsd, Aug. 1, 1949. Records available: 1946-51. May 4, 27.82; June 3, 27.63; July 17, 27.20; Aug. 16, 26.77; Sept. 28, 26.90.

3-33-35dc. S. H. Lawrence. Drilled unused water-table well in gravel of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 27 feet. Highest water level 9.38 below lsd, June 10, 1949; lowest 12.04 below lsd, Oct. 6, 1948. Records available: 1935-43, 1946-51. June 20, 10.19; July 16, 10.30; Aug. 22, 10.30; Oct. 3, 10.50.

4-33-23ad. U. S. Geol. Survey. Drilled observation water-table well in silt and fine sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 19 feet. Highest water level 11.70 below lsd, June 9, 1949; lowest 13.86 below lsd, Oct. 6, 1948. Records available: 1946-51. May 9, 13.52; June 7, 12.87; July 5, 12.57; Aug. 21, 13.50; Oct. 8, 13.00; Dec. 27, 12.68.

Holt County

27-9-34da. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 1 inch, depth 17 feet. Highest water level 4.00 below lsd, June 4, 1935; lowest 9.90 below lsd, Sept. 1, 1948. Records available: 1934-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	7.73	Mar. 28	5.36	June 27	4.93	Sept. 10	6.45
	7.67		5.87		4.93		6.62
	7.84		6.16		5.49		6.07
Feb. 15	7.74	May 10	5.70	Aug. 14	7.63	Oct. 9	5.53
	7.94		5.88		7.26		23
Mar. 9	7.47	June 19	5.48	21	5.66	Nov. 22	6.59
	6.99		5.37		6.71		Dec. 23

29-11-9bb. Owner unknown. Drilled unused water-table well in sand of Pleistocene age, diameter 10 inches, depth 15 feet. Land-surface datum is 1,978.58 feet above msl. Highest water level 5.23 below lsd, Sept. 13, 1951; lowest 8.08 below lsd, Oct. 13, 1948. Records available: 1947-51. Feb. 13, 6.60; Mar. 24, 6.49; July 24, 5.70; Sept. 13, 5.23; Nov. 20, 5.41.

29-13-13dd. Owner unknown. Drilled unused water-table well in sand of Pleistocene age, diameter 6 inches, depth 55 feet. Land-surface datum is 2,055.81 feet above msl. Highest water level 34.87 below lsd, Nov. 20, 1951; lowest 43.07 below lsd, Mar. 22, 1948. Records available: 1947-51. Feb. 13, 38.03; Mar. 24, 37.79; July 24, 36.84; Sept. 13, 36.14; Nov. 20, 34.87.

30-13-27cc. Owner unknown. Drilled unused water-table well in sand of Pleistocene age, diameter 6 inches, depth 67 feet. Land-surface datum is 2,064.64 feet above msl. Highest water level 20.17 below lsd, Nov. 20, 1951; lowest 30.80 below lsd, Oct. 13, 1948. Records available: 1947-51. Feb. 13, 26.23; Mar. 24, 25.79; July 24, 23.51; Sept. 13, 22.12; Nov. 20, 20.17.

30-14-23dd. Drilled stock water-table well in sand of Pleistocene age, diameter 6 inches, depth 46 feet. Land-surface datum is 2,090.15 feet above msl. Highest water level 26.82 below lsd, Nov. 20, 1951; lowest 32.05 below lsd, July 12, 1948. Records available: 1947-48, 1950-51. Feb. 13, 30.16; Mar. 24, 29.97; July 24, 27.72; Sept. 13, 27.45; Nov. 20, 26.82.

31-14-35cb. Owner unknown. Drilled unused water-table well in sand of Pleistocene age, diameter 5 inches, depth 28 feet. Land-surface datum is 2,077.39 feet above msl. Highest water level 21.84 below lsd, Nov. 20, 1951; lowest 29.21 below lsd, June 15, 1948. Records available: 1947-51. Feb. 13, 27.19; Mar. 24, 27.08; July 24, 23.22; Sept. 13, 22.23; Nov. 20, 21.84.

#### Hooker County

24-31-18cb. U. S. Bureau of Reclamation. Drilled observation water-table well in sand of Pleistocene age, diameter 1 $\frac{1}{4}$  inches, depth 42 feet. Highest water level 32.51 below lsd, Oct. 5, 1950; lowest 32.75 below lsd, Oct. 19, 1948. Records available: 1948, 1950-51. Feb. 19, 32.64; Apr. 17, 32.52; Sept. 4, 32.71.

24-35-23dd. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in fine sand of Pleistocene age, diameter 1 inch, depth 23 feet. Highest water level 0.19 below lsd, June 8, 1935; lowest 20.87 below lsd, May 13, 1949. Records available: 1934-42, 1944-51. Feb. 19, 19.70; Apr. 17, 19.90; Sept. 4, 10.30.

#### Howard County

13-9-27ca. Placke Estate. Drilled unused water-table well in gravel of Pleistocene age, diameter 2 inches, depth 53 feet. Land-surface datum is 1,857.95 feet above msl. Highest water level 15.47 below lsd, Aug. 16, 1950; lowest 22.09 below lsd, Oct. 26, 1940. Records available: 1934-42, 1944, 1948-51. Jan. 4, 15.93.

13-11-11ba. Town of Dannebrog. Drilled unused water-table well in sand of Pleistocene age, diameter 8 inches, depth 31 feet. Land-surface datum is 1,870.84 feet above msl. Highest water level 25.11 below lsd, July 5-6, 1951; lowest 27.04 below lsd, Oct. 1, 1950. Records available: 1950-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.69	26.80	26.69	.....	.....	25.30	25.35	26.00	26.35	26.52	26.41	26.32
2	26.70	26.79	26.65	26.75	26.37	26.28	25.37	26.03	26.37	26.48	26.42	26.31
3	26.70	26.76	26.64	26.75	26.40	25.27	25.37	26.04	26.37	26.47	26.41	26.27
4	26.75	26.75	26.70	26.73	26.45	25.26	25.19	26.10	26.37	26.48	26.35	26.27
5	26.77	26.75	26.68	26.70	26.48	25.26	25.11	26.10	26.36	26.49	26.37	26.27
6	26.85	26.77	26.68	26.68	26.50	25.23	25.11	26.13	26.29	26.50	26.37	26.25
7	26.85	26.82	26.74	26.68	26.55	25.21	25.22	26.15	26.26	26.50	26.37	26.30
8	26.82	26.81	26.76	26.67	26.52	25.20	25.26	26.17	.....	26.50	26.37	26.31
9	26.73	26.78	26.80	26.67	26.51	25.27	25.32	26.15	.....	26.49	26.32	26.40
10	26.74	26.75	26.76	26.68	26.51	25.27	25.39	26.17	25.20	26.47	26.32	26.40
11	26.74	26.70	26.76	26.71	26.53	25.26	25.41	26.20	25.21	26.45	26.32	26.37
12	26.74	26.70	26.80	26.73	26.55	25.26	25.42	26.21	25.26	26.44	26.29	26.33
13	26.76	26.75	26.75	26.71	26.53	25.29	25.38	26.11	25.28	26.49	26.24	26.32
14	26.76	26.85	26.74	26.69	26.53	25.28	25.45	26.01	25.29	26.49	26.24	26.32
15	26.74	26.78	26.74	26.74	26.54	25.23	25.46	26.03	25.35	26.49	26.30	26.37
16	26.74	26.72	26.68	26.76	26.59	25.15	25.49	26.08	25.36	26.48	26.38	26.40
17	26.70	26.70	26.69	26.70	26.59	25.17	25.52	26.11	25.37	26.50	26.39	26.37
18	26.70	26.70	26.73	26.69	26.19	25.20	25.56	26.19	25.37	26.51	26.39	26.32
19	26.70	26.70	26.77	26.70	26.11	25.22	25.60	26.21	25.37	26.52	26.37	26.30
20	26.81	26.72	26.77	26.73	26.12	25.24	25.63	26.24	25.39	26.50	26.34	26.31
21	26.82	26.74	26.73	26.64	26.12	25.24	25.67	26.28	26.46	26.39	26.29	26.28
22	26.79	26.73	26.67	26.66	26.14	25.26	25.68	26.30	26.47	26.41	26.29	26.29
23	26.73	26.74	26.67	26.70	26.14	25.30	25.76	26.31	26.48	26.42	26.31	26.31
24	26.87	26.71	26.75	26.68	26.14	25.33	25.81	26.31	26.49	26.42	26.35	26.34
25	26.87	26.67	26.75	26.68	26.11	25.32	25.83	26.30	26.49	26.40	26.34	26.35
26	26.74	26.67	26.69	26.71	26.14	25.24	25.85	26.30	26.44	26.43	26.32	26.39
27	26.77	26.67	26.66	26.42	26.16	25.21	25.87	26.28	26.55	26.44	26.32	26.39
28	26.81	26.63	26.65	26.41	26.15	25.20	25.92	26.30	26.57	26.43	26.32	26.28
29	26.83	.....	26.69	26.40	26.14	25.25	25.92	26.31	26.57	26.40	26.31	26.25
30	26.83	.....	26.70	26.32	26.14	25.31	25.93	26.31	26.52	26.35	26.32	26.25
31	26.80	.....	.....	25.49	.....	25.97	26.35	.....	26.39	.....	26.37	.....

13-11-29cb. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter  $\frac{1}{4}$  inches, depth 11 feet. Land-surface datum is 1,875.92 feet above msl. Highest water level 2.79 below lsd, Apr. 10, 1950; lowest 5.46 below lsd, Oct. 31, 1950. Records available: 1949-51. Jan. 4, 5.33; Mar. 16, 4.95; May 14, 4.56; Sept. 14, 4.46; Dec. 5, 4.88.

13-12-29ba. Mrs. Olga Young. Dug unused water-table well in sand of Pleistocene age, diameter 36 inches, depth 31 feet, cribbed with brick. Land-surface datum is 1,928.08 feet above msl. Highest water level 24.36 below lsd, July 8, 1949; lowest 30.43 below lsd, Oct. 28, 1940. Records available: 1934-42, 1948-51. Jan. 4, 26.28; Mar. 16, 26.06; May 14, 25.75; July 9, 25.39; Sept. 14, 26.10; Dec. 5, 25.95.

14-10-14bb. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 12 feet. Land-surface datum is 1,795.83 feet above msl. Highest water level 4.21 below lsd, Aug. 17, 1950; lowest 8.15 below lsd, Oct. 29, 1940. Records available: 1934-42, 1944, 1948-51. Jan. 4, 6.20; July 9, 4.35.

14-10-28dd. School District. Drilled unused water-table well in sand of Pleistocene age, diameter  $\frac{1}{4}$  inches. Land-surface datum is 1,813.22 feet above msl. Highest water level 4.06 below lsd, May 22, 1949; lowest 5.47 below lsd, Dec. 6, 1949. Records available: 1949-51. Jan. 4, 5.27; Mar. 16, 5.12; May 14, 4.75; July 9, 4.81; Sept. 24, 5.45; Dec. 5, 5.46.

14-11-6ba. Town of Farwell. Drilled public supply water-table well in sand of Pleistocene age, diameter 12 inches, depth 115 feet. Records available: 1949. Aug. 15, 1949, 30.81. No measurement made in 1951.

15-9-9aa. Wilber Edwards. Drilled unused water-table well in sand of Pleistocene age, diameter 18 inches, depth 90 feet. Land-surface datum is 1,780.23 feet above msl. Highest water level 30.94 below lsd, Sept. 11, Oct. 2-3, 1951; lowest 32.91 below lsd, Feb. 20, 1949. Records available: 1948-51.

Daily lowest water level from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	31.22	31.34	31.30	.....	.....	31.39	31.11	30.98	31.02	30.96	31.12	31.12
2	31.21	31.31	31.27	31.49	31.50	31.40	31.08	30.98	31.03	30.94	31.12	31.10
3	31.21	31.30	31.31	31.46	31.49	31.41	31.09	31.01	31.03	30.94	31.10	31.12
4	31.27	31.32	31.39	31.46	31.49	31.39	31.10	31.00	31.02	31.00	31.10	31.12
5	31.25	31.31	31.33	31.43	31.48	31.35	31.08	30.97	31.01	31.04	31.14	31.09
6	31.32	31.40	31.37	31.44	31.52	31.30	31.03	30.98	31.02	31.04	31.12	31.06
7	31.28	31.40	31.42	31.44	31.47	31.26	31.02	30.97	31.03	31.04	31.13	31.24
8	31.27	31.38	31.45	31.44	31.43	31.28	31.02	30.96	.....	31.05	31.09	31.24
9	31.23	31.38	31.42	31.45	31.42	31.30	31.03	30.96	.....	31.02	31.10	31.23
10	31.26	31.30	31.39	31.46	31.47	31.29	31.04	30.97	30.95	31.01	31.10	31.20
11	31.25	31.27	31.46	31.47	31.46	31.25	31.03	30.99	30.94	31.01	31.09	31.17
12	31.25	31.30	31.44	31.47	31.45	31.24	31.04	30.99	31.00	31.01	31.02	31.17
13	31.27	31.40	31.40	31.44	31.44	31.25	31.06	30.98	31.01	31.01	31.05	31.18
14	31.26	31.40	31.41	31.44	31.45	31.23	31.04	30.97	31.01	31.06	31.07	31.25
15	31.29	31.33	31.41	31.51	31.47	31.21	31.02	30.99	31.02	31.05	31.14	31.22
16	31.25	31.29	31.35	31.50	31.49	31.20	31.03	30.98	31.02	31.08	31.20	31.22
17	31.22	31.29	31.39	31.42	31.47	31.21	31.03	30.97	30.98	31.08	31.14	31.18
18	31.23	31.29	31.45	31.44	31.43	31.21	31.03	30.97	30.97	31.08	31.14	31.21
19	31.29	31.32	31.44	31.52	31.44	31.18	31.01	30.97	30.95	31.08	31.11	31.13
20	31.37	31.36	31.44	31.47	31.45	31.19	30.97	30.98	30.95	31.05	31.09	31.14
21	31.37	31.36	31.39	31.48	31.44	31.16	31.01	30.99	31.02	31.05	31.11	31.18
22	31.26	31.37	31.36	31.54	31.46	31.15	31.03	30.99	31.00	31.10	31.13	31.19
23	31.30	31.36	31.39	31.49	31.45	31.15	31.02	30.98	30.99	31.11	31.16	31.26
24	31.33	31.33	31.45	31.48	31.38	31.17	31.01	30.96	31.00	31.09	31.16	31.25
25	31.33	31.32	31.45	31.49	31.39	31.15	30.99	30.99	31.00	31.09	31.15	31.27
26	31.27	31.33	31.38	31.48	31.41	31.12	30.99	30.99	30.98	31.10	31.17	31.30
27	31.34	31.29	31.37	31.42	31.42	31.15	30.99	30.97	31.05	31.10	31.14	31.30
28	31.37	31.27	31.37	31.45	31.42	31.16	30.99	30.97	31.06	31.05	31.15	31.16
29	31.37	.....	31.45	31.43	31.42	31.13	30.98	31.00	30.99	31.02	31.15	31.14
30	31.36	.....	31.45	31.43	31.42	31.12	30.99	31.00	30.97	31.10	31.15	31.15
31	31.34	.....	.....	31.37	.....	30.99	31.02	.....	31.12	.....	31.20	.....

15-10-19ab. Harry Ward. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 82 feet. Land-surface datum is 1,801.15 feet above msl. Highest water level 8.48 below lsd, June 29, 1948; lowest 11.53 below lsd, Sept. 2, 1949. Records available: 1948-51. Jan. 8, 10.64.

16-11-19cb1. Ray Parker. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 96 feet. Land-surface datum is 1,904.72 feet above msl. Highest water level 40.56 below lsd, May 31-June 1, 1951; lowest 46.41 below lsd; July 28-Aug. 1, 1951. Records available: 1950-51.

Day	Daily lowest water level from recorder graph											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	42.00	42.02	41.97	.....	.....	40.56	41.57	46.41	42.66	42.18	42.00	41.81
2	42.07	42.01	41.89	41.95	41.65	40.57	41.56	44.27	42.63	42.15	42.00	41.79
3	42.09	42.02	41.95	41.92	41.65	40.57	41.58	43.82	42.60	42.15	42.05	41.81
4	42.11	42.02	41.97	41.92	41.64	40.57	41.59	43.60	42.57	42.17	42.04	41.80
5	42.10	42.01	41.95	41.90	41.64	41.55	41.60	43.47	42.54	42.17	42.04	41.79
6	42.11	42.06	41.98	41.92	41.66	41.53	41.59	.....	42.52	42.16	42.02	41.77
7	42.08	42.06	41.96	41.90	41.60	41.55	41.58	.....	42.51	42.13	42.02	41.81
8	42.06	42.04	41.99	41.90	41.58	41.59	41.60	.....	.....	42.13	42.00	41.81
9	42.07	42.04	41.97	41.88	41.57	41.60	41.60	45.00	.....	42.12	42.00	41.79
10	42.07	41.98	41.97	41.89	41.60	41.55	41.61	44.02	42.43	42.11	41.98	41.79
11	42.05	41.97	42.01	41.85	41.57	41.56	41.59	43.77	42.41	42.10	41.96	41.74
12	42.05	42.00	41.98	41.85	41.57	41.56	41.60	43.59	42.43	42.09	41.93	41.74
13	42.05	42.04	41.96	41.80	41.57	41.56	41.61	43.50	42.41	42.10	41.96	41.74
14	42.03	42.02	.....	41.81	41.57	41.56	41.60	43.40	42.38	42.12	41.97	41.74
15	42.05	41.98	.....	41.83	41.59	41.55	41.59	43.32	42.36	42.09	41.97	41.76
16	42.02	41.96	41.94	41.83	41.61	41.56	41.60	43.25	42.34	42.11	41.94	41.76
17	42.01	41.96	41.96	41.74	41.59	41.57	41.60	43.18	42.32	42.09	41.95	41.70
18	42.01	41.96	41.98	41.77	41.58	41.57	41.61	43.14	42.31	42.08	41.88	41.72
19	42.06	41.98	41.97	41.78	41.60	41.56	41.58	43.10	42.28	42.07	41.87	41.72
20	42.08	41.98	41.97	.....	41.60	41.58	41.56	43.03	42.31	42.03	41.85	41.68
21	42.07	41.97	41.93	41.77	41.60	41.56	41.62	43.01	42.31	42.05	41.88	41.68
22	42.03	41.98	41.93	41.80	41.61	41.57	41.62	42.97	42.28	42.06	41.87	41.77
23	42.03	41.96	41.95	41.76	41.60	41.56	41.60	42.92	42.28	42.04	41.86	41.77
24	42.05	41.93	41.97	41.75	41.58	41.57	.....	42.88	42.27	42.01	41.87	41.66
25	42.04	41.94	41.97	41.77	41.59	41.55	.....	42.85	42.26	42.04	41.87	41.72
26	42.05	41.95	41.92	41.56	41.59	41.55	.....	42.84	42.28	42.05	41.86	.....
27	42.06	41.92	41.93	41.40	41.59	41.59	46.19	42.78	42.26	42.02	41.83	.....
28	42.06	41.91	41.97	41.66	41.56	41.59	46.41	42.76	42.26	42.00	41.83	.....
29	42.06	.....	41.95	41.65	40.58	41.57	46.41	42.73	42.20	41.97	41.82	.....
30	42.03	.....	41.95	41.63	40.57	41.57	46.41	42.69	42.20	42.03	41.82	.....
31	42.03	.....	.....	.....	40.56	.....	46.41	42.68	42.03	.....	.....	.....

Jefferson County

A1-4-19ac. Robert Garrett. Drilled unused water-table well in glacial drift, diameter 5 inches, depth 35 feet. Highest water level 28.31 below lsd, July 1, 1938; lowest 31.43 below lsd, Oct. 23, 1937. Records available: 1934-40, 1946. No measurement made in 1951.

Kearney County

5-14-16cb. Nels Peterson. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 255 feet. Land-surface datum is 2,179.70 feet above msl. Highest water level 140.10 below lsd, Aug. 21, 1951; lowest 142.18 below lsd, Aug. 11, 1947. Records available: 1947-51. May 24, 140.71; Aug. 21, 140.10.

5-14-33bb. Mrs. Ingeborg Nielson. Drilled unused water-table well in sand of Pleistocene age, diameter 6 inches, depth 172 feet. Land-surface datum is 2,175.07 feet above msl. Highest water level 157.51 below lsd, Sept. 26, 1950; lowest 158.53 below lsd, Sept. 14, 1948. Records available: 1948-51. Jan. 22, 158.00; Mar. 15, 157.93; May 24, 157.90; Aug. 21, 158.09; Oct. 23, 157.92.

5-15-3ba. Ed Downs. Formerly Leland Thomsen. Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 6 inches, depth 122 feet. Land-surface datum is 2,192.73 feet above msl. Highest water level 101.55 below lsd, Aug. 20, 1951; lowest 108.15 below lsd, Aug. 8, 1947. Records available: 1947-51.

Day	Daily lowest water level from recorder graph											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	102.76	.....	102.32	.....	102.45	102.35	.....	.....	101.92	.....	.....
2	.....	102.61	.....	102.36	.....	102.55	102.30	.....	.....	101.92	.....	.....
3	.....	102.60	.....	102.27	.....	102.56	102.38	.....	.....	101.77	.....	.....
4	.....	102.72	.....	102.21	.....	102.56	102.43	.....	.....	102.19	.....	.....
5	.....	102.57	.....	102.15	.....	102.49	102.34	.....	.....	102.26	.....	.....

## 5-15-3ba--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	.....	102. 60	.....	102. 16	.....	102. 35	102. 29	.....	.....	102. 27	.....	.....
7	.....	102. 75	.....	102. 22	.....	102. 28	102. 25	.....	.....	102. 18	.....	.....
8	.....	102. 63	.....	102. 20	.....	102. 47	.....	.....	.....	102. 12	.....	.....
9	.....	102. 67	.....	102. 19	.....	102. 55	.....	.....	.....	101. 97	.....	.....
10	.....	102. 61	.....	102. 21	.....	102. 55	.....	.....	.....	101. 97	.....	.....
11	.....	102. 58	.....	102. 23	.....	102. 37	.....	.....	101. 82	101. 77	.....	.....
12	.....	102. 62	.....	102. 22	.....	102. 37	.....	.....	102. 17	101. 77	.....	.....
13	.....	103. 07	.....	102. 02	.....	102. 40	.....	.....	102. 20	101. 90	.....	.....
14	.....	102. 95	.....	102. 02	.....	102. 39	.....	.....	102. 24	102. 03	.....	.....
15	.....	.....	.....	102. 33	.....	102. 32	.....	.....	102. 28	102. 94	.....	.....
16	.....	.....	.....	102. 22	.....	102. 32	.....	.....	102. 24	102. 07	.....	.....
17	.....	.....	102. 23	101. 91	.....	102. 28	.....	.....	102. 04	102. 07	.....	.....
18	.....	.....	102. 48	101. 92	.....	102. 44	.....	.....	102. 02	102. 14	.....	.....
19	.....	.....	102. 32	102. 24	.....	102. 44	.....	.....	102. 02	102. 13	.....	.....
20	.....	.....	102. 32	102. 19	.....	102. 42	.....	101. 55	102. 08	101. 97	.....	.....
21	.....	.....	102. 16	102. 20	.....	102. 33	.....	.....	102. 18	101. 97	.....	.....
22	.....	.....	101. 97	102. 31	.....	102. 37	.....	.....	102. 12	102. 00	.....	.....
23	102. 96	.....	102. 12	102. 05	.....	102. 42	.....	.....	102. 00	102. 04	.....	.....
24	102. 97	.....	102. 37	102. 03	102. 24	102. 50	.....	.....	102. 00	101. 95	.....	.....
25	102. 73	.....	102. 08	102. 12	102. 46	102. 38	.....	.....	102. 00	101. 93	.....	.....
26	102. 53	.....	102. 08	102. 07	102. 55	102. 36	.....	.....	102. 07	102. 08	.....	.....
27	102. 84	.....	102. 02	102. 04	102. 55	102. 45	.....	.....	102. 27	102. 08	.....	.....
28	103. 11	.....	102. 13	101. 95	102. 51	102. 53	.....	.....	102. 27	.....	.....	.....
29	103. 04	.....	102. 29	101. 90	102. 50	102. 38	.....	.....	101. 92	.....	.....	.....
30	102. 80	.....	102. 26	.....	102. 50	102. 40	.....	.....	101. 92	.....	.....	.....
31	102. 78	.....	102. 25	.....	102. 37	.....	.....	.....	.....	.....	.....	.....

5-16-30da. R. R. Caswell. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 172 feet. Land-surface datum is 2, 228. 21 feet above msl. Highest water level 135. 48 below lsd, May 24, 1951; lowest 137. 65 below lsd, Aug. 3, 1948. Records available: 1947-51. Jan. 23, 135. 64; Mar. 15, 135. 77; May 24, 135. 48; Oct. 22, 135. 77.

6-13-16db. V. M. Youngson. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 171 feet. Land-surface datum is 2, 082. 10 feet above msl. Highest water level 84. 57 below lsd, Oct. 23, 1951; lowest 89. 42 below lsd, Aug. 13, 1947. Records available: 1947-51. Jan. 23, 85. 52; Mar. 17, 85. 82; Aug. 21, 85. 22; Oct. 23, 84. 57.

6-14-21db. Eva L. Larson. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches. Land-surface datum is 2, 155. 93 feet above msl. Highest water level 103. 20 below lsd, July 27, 1950; lowest 104. 62 below lsd, Dec. 5, 1950. Records available: 1947-51. Jan. 23, 104. 33; Mar. 17, 104. 59; Aug. 21, 104. 27.

6-15-1cb. Roy Youngson. Drilled irrigation water-table well in gravel, diameter 18 inches, depth 176 feet. Land-surface datum is 2, 171. 80 feet above msl. Highest water level 66. 67 below lsd, Oct. 23, 1951; lowest 71. 36 below lsd, June 29, 1948. Records available: 1948-51. Jan. 23, 68. 97; Mar. 17, 68. 89; May 24, 67. 67; Oct. 23, 66. 67.

6-16-14ad. George Johnson. Drilled irrigation water-table well in sand of Pleistocene age, diameter 12 inches, depth 210 feet. Land-surface datum is 2, 217. 72 feet above msl. Highest water level 77. 24 below lsd, May 24, 1951; lowest 82. 65 below lsd, Apr. 12, 1949. Records available: 1948-51. Jan. 23, 77. 58; Mar. 17, 77. 46; May 24, 77. 24; Oct. 23, 79. 52.

6-16-20bb. Elmer E. Carlson. Drilled unused water-table well in gravel, diameter 3 inches, depth 102 feet. Land-surface datum is 2, 235. 72 feet above msl. Highest water level 68. 22 below lsd, Jan. 23, 1951; lowest 100. 50 below lsd, Oct. 29, 1938. Records available: 1934-42, 1946-51. Jan. 23, 68. 22; Mar. 17, 68. 39; May 24, 72. 23.

7-13-20aa. Charles Gleason. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 168 feet. Land-surface datum is 2, 087. 54 feet above msl. Highest water level 52. 68 below lsd, Oct. 23, 1951; lowest 56. 67 below lsd, Nov. 17, 1947. Records available: 1947-51. Jan. 23, 53. 26; Mar. 15, 53. 23; May 25, 53. 03; Aug. 21, 52. 91; Oct. 23, 52. 68.

7-14-20ba. George Burchall. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 183 feet. Land-surface datum is 2, 155. 96 feet above msl. Highest water level 72. 62 below lsd, Oct. 23, 1951; lowest 75. 75 below lsd, June 10, 1949. Records available: 1948-51. Jan. 23, 73. 65; Mar. 17, 74. 48; May 25, 73. 67; Aug. 21, 72. 99; Oct. 23, 72. 62.

7-16-8dc. Israel Kring Estate. Drilled irrigation water-table well in sand of Pleistocene age, diameter 14 inches, depth 54 feet. Land-surface datum is 2,176.80 feet above msl. Highest water level 13.52 below lsd, July 27, 1950; lowest 18.93 below lsd, Aug. 7, 1947. Records available: 1947-51. Jan. 23, 15.96; Mar. 17, 15.83; May 25, 15.61; Aug. 20, 16.25; Oct. 22, 14.59.

8-14-13db. Hardon Yensen. Drilled irrigation water-table well in gravel and fine sand, diameter 24 inches, depth 40 feet. Land-surface datum is 2,062.07 feet above msl. Highest water level 6.39 below lsd, May 3, 1951; lowest 10.98 below lsd, Oct. 27, 1940. Records available: 1930-51. Jan. 13, 7.66; Mar. 30, 6.94; May 3, 6.39; July 26, 7.07; Oct. 18, 7.64.

8-15-21dc. George Raffety. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 32 feet. Land-surface datum is 2,119.20 feet above msl. Highest water level 3.20 below lsd, Nov. 15, 1946; lowest 7.25 below lsd, Sept. 11, 1947. Records available: 1946-51. Jan. 13, 5.33; Mar. 30, 4.43; May 3, 3.88; July 30, 4.69; Oct. 18, 4.67.

8-16-28aa. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 15 feet. Land-surface datum is 2,159.34 feet above msl. Highest water level 4.36 below lsd, Oct. 10, 1946; lowest 7.60 below lsd, Sept. 7, 1946. Records available: 1946-51. Jan. 13, 6.38; Mar. 30, 5.93; May 11, 5.61; July 30, 5.44; Oct. 18, 5.65.

#### Keith County

13-35-6dd. Central Nebraska Public Power and Irrigation District. Drilled observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 15 feet. Land-surface datum is 3,063.88 feet above msl. Highest water level 5.90 below lsd, May 8, 1942; lowest 11.63 below lsd, Feb. 10, 1951. Records available: 1938-46, 1948-51. Feb. 10, 11.63; Apr. 17, 10.88; May 22, 11.26; Oct. 2, 10.73.

13-36-8cc. U. S. Geol. Survey. Drilled unused water-table well in Platte Valley alluvium, diameter 15 inches, depth 11 feet. Land-surface datum is 3,111.83 feet above msl. Highest water level 1.52 below lsd, June 13, 1949; lowest 5.79 below lsd, Aug. 17-22, 1946. Records available: 1946-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.38	3.60	3.26	3.51	3.56	....	....	3.54	4.04	3.56	....	3.06
2	3.39	3.61	3.26	3.54	3.58	....	....	3.61	4.03	3.56	3.08	3.06
3	3.40	3.60	3.26	3.55	....	....	....	3.64	3.88	3.57	3.04	3.08
4	3.35	3.60	3.20	3.57	....	3.83	....	3.65	3.74	3.60	3.08	3.08
5	3.30	3.59	3.21	3.58	....	3.88	2.95	3.72	3.73	3.60	3.11	3.06
6	3.37	3.57	3.28	3.49	....	3.91	3.00	3.78	3.75	3.57	3.11	3.09
7	3.41	3.57	3.29	3.49	....	3.92	3.06	3.82	3.76	3.49	3.11	3.10
8	3.41	3.50	3.32	3.53	....	3.92	3.15	3.79	3.77	3.47	3.09	3.08
9	3.42	3.47	3.31	3.57	....	....	3.19	3.77	3.79	3.47	3.11	3.05
10	....	3.42	3.27	3.61	3.74	....	3.19	3.66	3.80	3.46	....	3.13
11	....	3.38	3.28	3.61	3.76	....	3.17	3.52	3.80	3.45	....	3.15
12	....	3.30	3.28	3.62	3.78	1.98	3.16	3.36	3.80	3.43	....	3.27
13	....	3.28	3.29	3.63	3.79	2.17	....	3.36	3.78	3.38	....	3.30
14	....	3.28	3.28	3.64	3.79	2.03	....	3.40	3.67	3.34	....	3.28
15	3.43	3.29	3.27	3.66	3.78	2.25	....	3.47	3.60	3.30	....	3.28
16	3.40	3.31	3.32	3.66	3.14	2.42	....	....	3.62	....	....	3.25
17	3.36	3.31	3.35	....	3.16	2.47	3.18	....	3.57	....	....	....
18	3.34	3.29	3.36	....	3.15	2.47	3.25	....	3.46	3.25	....	3.27
19	3.32	3.24	3.36	....	3.07	2.61	3.30	....	3.48	3.24	....	3.30
20	3.33	3.24	....	....	3.11	....	3.36	....	3.53	3.23	....	3.28
21	3.33	3.21	3.35	....	2.56	....	3.40	....	3.54	3.25	....	3.25
22	3.37	3.25	3.35	....	2.52	....	3.41	....	3.55	3.25	....	3.28
23	3.36	3.25	3.36	....	2.65	....	3.40	....	3.58	3.19	....	3.31
24	3.37	3.24	3.37	....	2.80	....	....	....	3.61	3.17	....	3.32
25	3.37	3.23	3.38	....	2.93	....	3.50	....	3.62	3.15	....	3.32
26	3.33	3.22	3.38	3.62	3.03	....	3.57	....	3.67	3.16	....	3.32
27	3.32	3.22	3.39	3.55	3.11	....	3.61	3.91	3.67	3.16	3.07	3.30
28	3.41	3.24	3.43	3.51	3.18	....	3.62	3.94	3.66	3.10	3.07	3.21
29	3.49	....	3.44	3.49	3.25	....	3.30	3.96	3.59	3.06	3.07	3.16
30	3.55	....	3.45	3.53	3.23	....	3.36	4.00	3.56	....	3.07	3.14
31	....	....	3.48	....	3.23	....	3.44	4.03	....	....	3.05	....

13-36-9ad. U. S. Geol. Survey. Drilled observation water-table well in Platte Valley alluvium, diameter 15 inches, depth 11 feet. Land-surface datum is 3,093.6 feet above msl. Highest water level 0.02 above lsd, Mar. 16, 1946; lowest 3.74 below lsd, Aug. 17-22, 1946. Records available: 1946-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	0.66	1.27	....	....	....	2.02	2.31	1.78	....	1.09
2	1.35	....	.61	1.30	....	....	....	2.08	2.07	1.77	1.20	1.15
3	1.37	....	.60	1.33	....	....	....	2.08	1.86	1.77	1.08	1.19
4	1.38	....	.60	1.36	....	1.14	....	2.12	1.52	1.61	1.20	1.24
5	1.38	....	.70	1.36	....	1.23	1.13	2.22	1.64	1.62	1.16	1.25
6	1.43	....	.78	.72	....	1.24	1.23	2.26	1.74	.93	1.08	1.13
7	1.49	....	.79	.96	....	.78	1.33	2.30	1.75	1.12	1.20	1.20
8	1.50	....	.90	1.11	....	1.20	1.45	2.35	1.87	1.22	1.12	1.25
9	1.49	....	.90	1.16	....	1.37	1.45	2.35	1.92	1.25	1.13	1.31
10	....	....	.90	1.21	1.83	1.16	1.20	2.18	1.99	1.29	....	1.33
11	....	....	1.05	1.28	1.87	1.25	1.99	2.13	2.08	1.31	....	1.30
12	....	....	1.07	1.36	1.92	.15	1.99	2.22	2.08	1.33	....	....
13	....	....	1.09	1.40	1.92	.37	1.15	2.22	1.93	1.35	....	....
14	....	1.01	1.09	1.45	1.60	.26	1.26	2.26	1.93	1.23	....	....
15	1.52	1.00	1.07	1.51	1.15	.47	1.40	2.30	1.93	1.23	....	....
16	1.48	.97	1.00	1.56	.67	.70	1.51	....	1.88	1.33	....	....
17	1.40	.97	1.06	....	.67	.57	1.58	....	1.86	1.33	....	1.23
18	1.34	.93	1.06	....	.38	.30	1.55	....	1.85	1.35	....	1.24
19	1.29	.91	1.06	....	.69	.30	1.69	....	1.86	1.35	....	1.30
20	1.29	.87	1.08	....	.70	....	....	....	1.86	1.29	....	1.34
21	1.29	.78	1.01	....	.44	....	....	....	1.86	1.30	....	1.38
22	1.28	.77	.96	....	.69	....	....	....	1.67	1.29	....	1.37
23	....	.76	1.03	....	.89	....	....	....	1.69	1.00	....	1.35
24	....	.65	1.09	....	1.09	....	....	....	1.71	1.10	....	1.31
25	....	.53	1.08	....	1.23	....	1.83	....	1.72	1.23	....	1.35
26	....	.58	.93	1.30	1.33	....	1.92	....	1.79	1.26	....	1.38
27	....	.55	.90	....	1.42	....	1.95	1.92	1.79	1.05	1.18	1.37
28	....	.63	1.11	....	1.48	....	1.95	2.05	1.79	.81	1.19	1.28
29	....	....	1.19	....	1.45	....	1.56	2.13	1.79	.94	1.19	1.23
30	....	....	1.23	....	1.49	....	1.75	2.25	1.78	....	1.15	1.08
31	....	....	1.24	....	1.08	....	1.89	2.31	....	....	....	.83

13-37-3ab. Owner unknown. Drilled unused water-table well in gravel of Pleistocene age, diameter 6 inches. Highest water level 10.55 below lsd, May 8, 1942; lowest 15.80 below lsd, Nov. 6, 1947. Records available: 1935-49. No measurement made in 1951.

13-38-3ba. Central Nebraska Public Power and Irrigation District. Drilled observation water-table well in coarse sand and gravel of Pleistocene age, diameter 5 inches, depth 19 feet. Land-surface datum is 3,197.58 feet above msl. Highest water level 9.27 below lsd, May 8, 1942; lowest 15.79 below lsd, Aug. 2, 1943. Records available: 1936-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2, 1948	g13.50	Mar. 1, 1949	g12.60	Feb. 2, 1950	g12.90	Nov. 30, 1950	g13.70
Feb. 4	g13.00	May 10	g12.70	Mar. 3	g12.90	Jan. 3, 1951	g13.40
Mar. 2	g12.70	June 4	g12.70	31	g12.90	Feb. 9	g13.10
Apr. 3	g12.60	July 7	g12.00	May 4	g13.30	10	13.07
May 5	g13.20	30	g13.30	June 2	g13.80	Apr. 4	g13.50
June 3	g13.80	Sept. 2	g14.30	30	g14.40	17	13.58
July 8	g14.00	Oct. 5	g14.10	July 31	g14.20	June 5	g14.90
Aug. 5	g14.10	Nov. 1	g13.80	Aug. 31	g12.90	July 10	g13.30
Sept. 2	g14.70	30	g13.60	Sept. 30	g13.40	Aug. 6	g12.90
Oct. 1	g14.80	Dec. 31	g13.00	Nov. 1	g13.90	Oct. 2	g13.70
Nov. 2	g14.40						

g Measurements furnished by Central Nebraska Public Power and Irrigation District.

13-38-6ca. Central Nebraska Public Power and Irrigation District. Drilled observation water-table well in fine and coarse sand and gravel, diameter 5 inches, depth 16 feet. Land-surface datum is 3,217.84 feet above msl. Highest water level 9.94 below lsd, May 8, 1942; lowest 15.50 below lsd, July 31, 1950. Records available: 1936-51.

Jan. 3, 1948	g13.50	June 3, 1948	g13.70	Nov. 2, 1948	g14.50	July 8, 1949	g14.00
Feb. 3	g13.00	July 8	g14.00	Dec. 24	g13.90	Aug. 3	g14.30
Mar. 4	g12.40	Aug. 3	g14.30	Mar. 1, 1949	g13.70	Sept. 2	g14.50
Apr. 5	g12.20	Sept. 2	g14.50	May 10	g12.80	Oct. 5	g14.80
May 6	g12.80	Oct. 1	g14.90	June 4	g12.90	Nov. 1	g14.30

13-38-6ca--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 30, 1949	g14.20	June 2, 1950	g14.30	Nov. 30, 1950	g14.40	May 22, 1951	14.37
Dec. 31	g14.20	30	g15.40	Jan. 3, 1951	g14.10	June 5	g14.00
Feb. 2, 1950	g14.00	July 31	g15.50	Feb. 9	g14.00	July 10	g14.00
Mar. 3	g13.70	Aug. 31	g14.90	10	14.05	Aug. 6	g14.60
31	g13.60	Sept. 30	g14.70	Apr. 4	g14.10	Oct. 2	g14.50
May 3	g14.00	Nov. 1	g14.80	17	14.24	2	14.56

g Measurements furnished by Central Nebraska Public Power and Irrigation District.

13-39-19cd. George McGinley. Drilled unused water-table well in alluvial gravel or Ogallala formation, diameter 4 inches, depth 54 feet. Highest water level 39.96 below lsd, Oct. 27, 1935; lowest 43.85 below lsd, Oct. 19, 1950. Records available: 1935-41, 1944, 1947-51. Feb. 10, 43.65; Apr. 17, 43.81; May 22, 43.69; Oct. 2, 43.47.

13-39-34dd. George Peters Estate. Drilled unused water-table well in the Ogallala formation, diameter 3 inches, depth 199 feet. Highest water level 166.07 below lsd, Oct. 6, 1949; lowest 167.47 below lsd, Nov. 19, 1942. Records available: 1935-42, 1947, 1949-50. No measurement made in 1951.

13-40-22bb. Central Nebraska Public Power and Irrigation District. Drilled observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 12 feet. Land-surface datum is 3,292.14 feet above msl. Highest water level 2.64 below lsd, May 8, 1942; lowest 9.24 below lsd, Oct. 6, 1943. Records available: 1939-50. No measurement made in 1951.

16-38-7aa. Central Nebraska Public Power and Irrigation District. Drilled observation water-table well in fine sand of Pleistocene age, diameter 4 inches, depth 15 feet. Land-surface datum is 3,499.11 feet above msl. Highest water level 7.63 below lsd, May 4, 1942; lowest 10.60 below lsd, July 31-Dec. 30, 1950, Feb. 28, Mar. 31, and Apr. 30, 1951. Records available: 1936-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	10.52	Mar. 28	10.57	May 31	10.50	Oct. 1	g10.50
Feb. 8	10.58	31	10.60	July 5	g10.00	3	10.48
28	g10.60	Apr. 30	10.60	31	g10.30	31	10.50
28	10.58	May 31	g10.50	Sept. 9	10.40	Nov. 30	10.48

g Measurements furnished by Central Nebraska Public Power and Irrigation District.

Kimball County

14-59-11dd. A. Mortensen. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 84 feet. Highest water level 21.99 below lsd, May 23, 1951; lowest 22.28 below lsd, Jan. 12, 1951. Records available: 1950-51. Jan. 12, 22.28; Mar. 29, 22.26; May 23, 21.99; Nov. 21, 22.03.

15-53-31bb. Robert Gunderson. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 85 feet. Highest water level 46.83 below lsd, Nov. 20, 1951; lowest 47.92 below lsd, Mar. 29, 1951. Records available: 1951. Jan. 12, 47.26; Mar. 29, 47.92; May 23, 47.71; Nov. 20, 46.83.

15-55-17cc. Kimball Irrigation District. Drilled unused water-table well in gravel, diameter 4 inches, depth 114 feet. Highest water level 92.18 below lsd, Jan. 2, 1936; lowest 96.07 below lsd, June 22, 1950. Records available: 1935-42, 1950-51. Mar. 29, 95.82; May 23, 95.67; Aug. 8, 96.03; Nov. 21, 95.61.

15-55-26cc. Henry Meier. Drilled irrigation water-table well in sand of Pleistocene age, diameter 24 inches, depth 120 feet. Highest water level 40.47 below lsd, Jan. 2, 1936; lowest 43.74 below lsd, May 23, 1951. Records available: 1936-37, 1951. Jan. 12, 43.21; Mar. 29, 43.28; May 23, 43.74; Nov. 20, 41.89.

15-55-29db. Gale Russell. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 85 feet. Records available: 1950. No measurement made in 1951.

15-56-32ac. Vernon Linn. Drilled irrigation water-table well in sand and gravel, diameter 18 inches, depth 180 feet. Highest water level 20.44 below lsd, Nov. 20, 1951; lowest 22.31 below lsd, Aug. 8, 1951. Records available: 1951. Jan. 12, 21.89; Mar. 29, 22.04; May 23, 21.87; Aug. 8, 22.31; Nov. 20, 20.44.

Lancaster County

A8-7-33ab. U. S. Geol. Survey. Drilled observation water-table well in sand, diameter  $1\frac{1}{4}$  inches, depth 33 feet. Highest water level 3.90 below lsd, Nov. 28, 1951; lowest 4.50 below lsd, Dec. 26, 1951. Records available: 1951. Nov. 28, 3.90; Dec. 12, 4.10; Dec. 26, 4.50.

A10-6-1cc. J. F. Keech Estate. Drilled unused water-table well in glacial fill, diameter 8 inches, depth 70 feet. Highest water level 6.38 below lsd, July 3, 1951; lowest 22.91 below lsd, Feb. 17, 1951. Records available: 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	22.20	Mar. 25	21.88	June 10	6.65	Sept. 16	13.55
	22.48		20.66		6.38		Oct. 21 13.37
Feb. 3	22.74	May 7	14.71	Aug. 19	8.11	Nov. 10	14.67
	22.91		13.98		10.98		Dec. 9 15.84

Lincoln County

12-26-35db. R. D. McWha. Drilled irrigation water-table well in sand of Pleistocene age, diameter 24 inches, depth 42 feet. Land-surface datum is 2,609.43 feet above msl. Highest water level 7.32 below lsd, July 13, 1947; lowest 11.74 below lsd, Aug. 8, 1951. Records available: 1946-51. Jan. 10, 10.39; Mar. 27, 9.88; May 8, 9.41; Aug. 8, 11.74; Oct. 17, 8.79.

12-27-14aa. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in sand and gravel, diameter 1 inch, depth 18 feet. Land-surface datum is 2,646.40 feet above msl. Highest water level 2.98 below lsd, July 2, 1935; lowest 7.07 below lsd, Aug. 30, 1941. Records available: 1934-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 7, 1948	g5.95	Apr. 4, 1949	g4.49	Dec. 29, 1949	g6.30	Mar. 27, 1951	6.04
Oct. 9	g6.33	May 2	g4.90	Mar. 17, 1950	g5.87	May 8	5.90
Nov. 3	g6.27	31	g4.38	July 15	g6.64	June 18	g3.78
Dec. 1	g6.27	July 5	g4.50	Sept. 18	g6.53	Aug. 7	5.11
Jan. 10, 1949	g5.52	Aug. 1	g5.40	Dec. 19	g6.14	Sept. 26	g5.66
Feb. 2	g5.32	31	g6.35	Jan. 10, 1951	g6.36	Oct. 16	5.69
Mar. 1	g4.58	Sept. 30	g6.60	Mar. 16	g5.74		

g Measurements furnished by Central Nebraska Public Power and Irrigation District.

12-27-28dd. U. S. Geol. Survey. Drilled observation water-table well in sand, diameter  $1\frac{1}{4}$  inches, depth 28 feet. Land-surface datum is 2,663.15 feet above msl. Highest water level 11.79 below lsd, July 7, 1949; lowest 13.29 below lsd, Nov. 2, 1950. Records available: 1947-51. Jan. 13, 13.28; Mar. 30, 13.11; May 9, 12.95; Aug. 7, 11.85; Oct. 16, 12.37.

12-28-9bc. Central Nebraska Public Power and Irrigation District. Drilled observation water-table well in alluvium, sand, and gravel, diameter 2 inches, depth 14 feet. Land-surface datum is 2,702.68 feet above msl. Highest water level 3.58 below lsd, Mar. 3, 1949; lowest 10.48 below lsd, Nov. 1, 1939. Records available: 1938-51.

Mar. 28, 1948	g5.05	Mar. 3, 1949	g3.58	Sept. 30, 1949	g5.26	Mar. 16, 1951	g4.94
Sept. 7	g5.72	Apr. 4	g4.43	Jan. 9, 1950	g4.84	30	4.99
Oct. 9	g5.41	May 3	g5.90	Mar. 18	g4.76	May 9	5.03
Nov. 3	g5.04	31	g4.72	July 15	g5.37	June 18	g3.99
Dec. 4	g4.83	July 5	g5.10	Sept. 18	g4.97	Aug. 7	4.32
Jan. 11, 1949	g4.84	Aug. 1	g6.16	Dec. 20	g4.85	Sept. 26	g4.91
Feb. 2	g4.89	31	g5.52	Jan. 13, 1951	4.97		

g Measurements furnished by Central Nebraska Public Power and Irrigation District.

13-28-21da. Central Nebraska Public Power and Irrigation District. Drilled observation water-table well in alluvial sand and gravel, diameter 2 inches, depth 11 feet. Land-surface datum is 2,711.36 feet above msl. Highest water level 0.14 above lsd, Apr. 5, 1949; lowest 6.48 below lsd, Aug. 29, 1940. Records available: 1938-51.

Jan. 8, 1948	g4.13	Feb. 2, 1949	g4.76	Aug. 31, 1949	g5.66	Jan. 10, 1951	3.68
Mar. 28	g2.25	Mar. 1	g2.83	Sept. 30	g5.42	Mar. 16	g1.92
Sept. 7	g5.64	Apr. 5	g4+.14	Dec. 29	g4.56	27	2.01
Oct. 9	g5.71	May 2	2.19	Mar. 17	g2.71	May 10	2.20
Nov. 3	g5.22	31	g1.76	July 15	g4.89	June 18	g.75
Dec. 1	g4.89	July 5	g3.62	Sept. 18	g3.47	Aug. 7	2.40
Jan. 10, 1949	g4.65	Aug. 1	g5.00	Dec. 19	g3.75	Oct. 16	4.89

g Measurements furnished by Central Nebraska Public Power and Irrigation District.

j Surrounding area inundated.

13-30-21bb. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 22 feet. Land-surface datum is 2,819.03 feet above msl. Highest water level 9.57 below lsd, May 3, 1949; lowest 19.92 below lsd, Sept. 17, 1936. Records available: 1934-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 28, 1948	g10.98	May 3, 1949	g9.57	Mar. 17, 1950	g11.20	May 9, 1951	11.20
Sept. 7	g12.20	31	g10.44	July 15	g11.91	June 18	g5.32
Oct. 9	g12.26	July 5	g10.54	Sept. 18	g11.07	Aug. 7	9.67
Nov. 3	g11.60	Aug. 1	g11.64	Dec. 20	g11.09	Sept. 26	g10.49
Dec. 1	g11.52	31	g12.52	Jan. 10, 1951	11.08	Oct. 16	10.56
Mar. 1, 1949	g11.31	Sept. 30	g11.85	Mar. 16	g10.98	Dec. 20	g10.54
Apr. 5	g10.87	Dec. 29	g11.25	28	10.97		

g Measurements furnished by Central Nebraska Public Power and Irrigation District.

14-30-9ca. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 26 feet. Land-surface datum is 2,832.35 feet above msl. Highest water level 2.55 below lsd, June 13, 1947; lowest 6.05 below lsd, Sept. 12, 1946. Records available: 1946-51. Jan. 10, 3.99; Mar. 28, 3.12; May 9, 3.49; Aug. 7, 2.95.

14-30-33cd. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Land-surface datum is 2,801.66 feet above msl. Highest water level 5.90 below lsd, June 23, 1947; lowest 8.26 below lsd, Nov. 3, 1948. Records available: 1946-51. Jan. 10, 7.79; Mar. 28, 7.78; May 9, 7.54; Aug. 7, 6.33; Oct. 16, 7.00.

14-33-17da. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 1 inch, depth 15 feet. Highest water level 0.45 below lsd, Aug. 3, 1945; lowest 4.58 below lsd, Aug. 30, 1940. Records available: 1936-46, 1951. Jan. 10, 3.62; Mar. 28, 3.59; May 22, 1.25; Oct. 1, 2.29. Measurement discontinued.

14-33-27da. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter 15 inches, depth 102 feet. Highest water level 1.58 below lsd, June 27, 1949; lowest 6.05 below lsd, Apr. 25-27, 1951. Records available: 1943-51.

#### Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.75	....	5.92	6.02	5.93	4.22	....	....	....	4.68	....	....
2	5.75	....	5.92	6.02	5.93	4.25	3.83	....	....	4.69	....	....
3	5.76	....	5.92	6.03	....	4.27	3.85	4.41	....	4.71	....	....
4	....	....	5.93	6.03	....	4.29	3.87	4.44	4.62	....	....	....
5	....	....	5.93	6.03	....	4.31	3.89	4.47	4.59	....	5.13	....
6	....	....	5.94	6.03	....	4.33	3.72	4.50	4.57	....	5.14	....
7	....	....	5.95	6.03	....	4.33	3.74	4.52	4.55	....	5.15	....
8	5.80	....	5.95	6.03	....	4.30	3.77	4.54	4.52	....	5.16	....
9	5.81	....	5.95	6.03	....	....	3.80	4.56	4.50	....	5.17	....
10	5.81	....	5.96	....	....	....	....	4.58	4.49	....	5.18	....
11	5.81	....	5.97	....	....	....	....	....	4.47	....	5.18	....
12	5.82	....	5.97	....	....	....	....	....	....	....	5.19	....
13	5.83	....	5.98	....	....	....	3.88	....	....	....	....	....
14	5.83	....	5.98	....	....	....	3.90	....	....	....	....	....
15	5.84	5.97	....	....	....	....	3.92	....	....	....	....	....
16	....	5.97	5.98	....	....	....	3.94	....	....	....	....	....
17	5.84	5.97	....	....	....	3.80	....	3.96	....	4.46	....	....
18	5.84	5.97	....	....	....	3.82	....	3.99	....	4.46	....	5.50
19	5.85	5.97	....	....	....	3.85	....	4.01	....	4.47	....	5.50
20	5.85	5.97	....	....	....	3.89	3.23	4.03	....	4.48	....	5.51
21	5.86	5.96	6.00	....	....	3.94	3.31	....	....	4.50	....	....
22	5.86	5.96	6.00	....	....	3.95	3.31	....	....	4.51	4.96	....
23	5.87	5.95	6.00	....	....	3.95	3.28	4.10	....	4.53	4.98	....
24	5.87	5.94	6.00	....	....	3.97	3.31	4.13	4.72	4.54	4.99	....
25	5.88	5.93	6.01	6.05	....	3.97	4.16	4.72	....	4.99	....	5.57
26	5.88	5.92	6.01	6.05	....	3.41	4.19	4.72	4.58	5.01	....	5.58
27	5.89	5.92	6.01	6.05	....	3.47	4.23	4.71	4.61	5.02	....	5.59
28	5.89	5.91	6.01	6.01	....	....	4.25	4.69	4.63	5.03	....	5.59
29	....	....	6.02	5.98	....	....	4.28	4.68	4.65	5.04	....	5.60
30	5.90	....	6.02	5.95	....	....	4.31	4.67	4.66	....	....	5.60
31	5.91	....	6.02	....	....	....	4.67	....	....	....	....	5.61

15-31-13dd. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 2 inches, depth 60 feet. Highest water level 7.77 below lsd, Jan. 10, Oct. 1, 1951; lowest 9.55 below lsd, Oct. 27, 1941. Records available: 1934-42, 1951. Jan. 10, 7.77; Mar. 28, 8.61; May 9, 8.67; Oct. 1, 7.77.

16-31-4ab. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in fine sand of Pleistocene age, diameter 2 inches, depth 120 feet. Highest water level 65.48 below lsd, Oct. 2, 1951; lowest 70.73 below lsd, July 25, 1940. Records available: 1935-42, 1951. Jan. 10, 70.62; Mar. 28, 70.57; May 9, 70.52; Oct. 2, 65.48.

#### Loup County

21-17-32dc. Louie Bohy. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches. Highest water level 23.23 below lsd, Oct. 5, 1950; lowest 24.52 below lsd, Apr. 26, 1951. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 30, 1950	23.24	Jan. 5, 1951	23.91	Apr. 26, 1951	24.52	Sept. 24, '51	23.49
Oct. 5	23.23	Mar. 7	24.27	July 10	23.91	Nov. 29	24.27
Nov. 1	23.36						

21-18-22aa. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 15 feet. Highest water level 3.67 below lsd, Mar. 7, 1951; lowest 5.31 below lsd, July 16, 1940. Records available: 1935-42, 1948, 1950-51. Jan. 5, 3.98; Mar. 7, 3.67; Apr. 26, 3.73; July 10, 4.15; Sept. 21, 3.96; Nov. 29, 4.08.

21-19-4bc. Bill Strong. Driven unused water-table well in sand of Pleistocene age, diameter 1½ inches, depth 22 feet. Highest water level 11.12 below lsd, July 10, 1951; lowest 11.91 below lsd, Jan. 17, 1951. Records available: 1951. Jan. 17, 11.91; Mar. 7, 11.65; Apr. 26, 11.69; July 10, 11.12; Sept. 21, 11.24; Nov. 29, 11.46.

#### Madison County

22-1-33cb. Alvin Christian. Drilled unused artesian well in sand of Pleistocene age, diameter 8 inches, depth 60 feet. Highest water level 1.33 above lsd, May 29, 1951; lowest 3.25 below lsd, Aug. 18, 1936. Records available: 1935-51. Jan. 18, +0.64; May 29, +1.33; Aug. 30, +0.94; Oct. 17, +1.30; Nov. 9, 0.73.

23-2-5aa. John Bredehoff. Drilled unused water-table well in alluvial sand, diameter 1½ inches, depth 31 feet. Highest water level 2.93 below lsd, June 4, 1935; lowest 4.86 below lsd, July 16, 1936. Records available: 1934-37, 1940-42, 1944-51. Jan. 16, 3.72; Mar. 9, 3.72; May 29, 3.58.

#### McPherson County

18-31-16dd. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in fine sand of Pleistocene age, diameter 2 inches, depth 120 feet. Highest water level 105.74 below lsd, Oct. 17, 1937; lowest 109.92 below lsd, Jan. 10, 1951. Records available: 1935-42, 1951. Jan. 10, 109.92; Mar. 28, 109.09; May 9, 109.01; Oct. 1, 108.94.

#### Merrick County

12-7-7aa. U. S. Geol. Survey. Driven observation water-table well in sand and gravel of Pleistocene age, diameter 1½ inches, depth 12 feet. Land-surface datum is 1,762.16 feet above msl. Highest water level 4.34 below lsd, July 10, 1947; lowest 7.32 below lsd, Sept. 4, 1946. Records available: 1945-51. Jan. 8, 6.91; Mar. 26, 6.56; May 1, 5.93; July 24, 5.15; Nov. 6, 6.00.

12-8-7dc. Owner unknown. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 22 inches, depth 47 feet. Highest water level 8.54 below lsd, July 24, 1951; lowest 13.79 below lsd, Sept. 4, 1946. Records available: 1946-51. Jan. 8, 9.47; Mar. 26, 9.52; May 1, 9.43; July 24, 8.54; Nov. 6, 9.16.

12-8-28dc. U. S. Geol. Survey. Driven observation water-table well in sand and gravel of Pleistocene age, diameter 1½ inches, depth 12 feet. Highest water level +0.91 above lsd, July 24, 1951; lowest 3.42 below lsd, Jan. 5, 1949. Records available: 1945-51. Jan. 8, 1.94; Mar. 26, 1.19; May 1, +0.17; July 24, +0.91; Nov. 6, 1.84.

13-6-2bc. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 13 feet. Land-surface datum is 1,687.85 feet above msl. Highest water level 4.36 below lsd, Apr. 12, 1949; lowest 6.91 below lsd, Nov. 11, 1947. Records available: 1945-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	6.04	July 26	4.85	Sept. 25	5.49	Nov. 23	5.47
May 7	4.93	Aug. 24	5.30	Oct. 23	5.31	Dec. 26	5.43

13-6-19cb. U. S. Geol. Survey. Driven observation water-table well in sand and gravel of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Highest water level 3.10 below lsd, July 10, 1947; lowest 5.75 below lsd, Jan. 5, Nov. 2, 1948. Records available: 1945-51. Jan. 8, 5.27; Mar. 26, 4.78; May 1, 4.14; July 24, 3.82; Nov. 6, 4.19.

14-5-9cc2. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 30 feet. Land-surface datum is 1,649.70 feet above msl. Highest water level 4.56 below lsd, July 8, 1947; lowest 7.14 below lsd, Nov. 11, 1947. Records available: 1947-51.

Mar. 15	7.00	July 26	4.95	Sept. 25	5.81	Nov. 23	6.04
May 7	5.61	Aug. 24	5.60	Oct. 23	5.91	Dec. 26	6.15

14-6-15bb. U. S. Geol. Survey. Driven observation water-table well in sand and gravel of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 13 feet. Land-surface datum is 1,679.85 feet above msl. Highest water level 1.82 below lsd, Mar. 8, 1949; lowest 5.64 below lsd, Sept. 4, 1946. Records available: 1945-51. Jan. 8, 3.78; Mar. 13, 3.07; May 7, 2.80; Aug. 20, 3.42.

14-7-21cb. Henry Tsudy. Drilled irrigation water-table well in gravel of Pleistocene age, diameter 8 inches, depth 32 feet. Land-surface datum is 1,737.77 feet above msl. Highest water level 4.16 below lsd, Apr. 13, 1949; lowest 9.74 below lsd, Aug. 6, 1934. Records available: 1934-42, 1945-51. Jan. 8, 6.76; Mar. 26, 6.09; May 1, 5.11; July 24, 5.64; Nov. 6, 6.68.

15-4-15dd. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 15 feet. Land-surface datum is 1,585.98 feet above msl. Highest water level 5.50 below lsd, July 8, 1947; lowest 9.01 below lsd, Jan. 9, 1951. Records available: 1945-51.

Jan. 9	9.01	July 26	6.97	Sept. 25	7.98	Nov. 23	8.30
Mar. 15	8.71	Aug. 24	7.68	Oct. 23	8.22	Dec. 26	8.36
May 7	7.84						

15-4-31cc. U. S. Geol. Survey. Driven observation water-table well in sand and gravel of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Land-surface datum is 1,615.79 feet above msl. Highest water level 2.13 below lsd, Apr. 15, 1949; lowest 5.22 below lsd, Nov. 11, 1947. Records available: 1945-51. Jan. 9, 4.93; Mar. 15, 4.58; May 7, 3.87; Aug. 21, 3.97.

15-5-8dd. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 19 feet. Land-surface datum is 1,650.32 feet above msl. Highest water level 11.15 below lsd, July 8, 1947; lowest 14.63 below lsd, Nov. 2, 1948. Records available: 1946-51.

Jan. 4	12.85	Mar. 30	13.34	July 26	12.02	Oct. 23	12.60
30	13.03	Apr. 26	13.43	Aug. 24	12.47	Nov. 23	12.79
Feb. 21	13.18	May 28	13.43	Sept. 25	12.44	Dec. 26	13.01

15-8-33bc. Dinsdale Bros. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 56 feet. Highest water level 10.38 below lsd, Feb. 6, 1950; lowest 16.54 below lsd, Aug. 8, 1949. Records available: 1948-51.

Jan. 29	11.27	Apr. 26	10.58	Aug. 24	10.91	Nov. 23	10.79
Feb. 21	11.15	May 28	10.50	Sept. 25	10.93	Dec. 26	11.06
Mar. 26	10.73	July 26	11.10	Oct. 23	10.88		

16-3-7dd. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 11 feet. Highest water level 0.79 below lsd, Apr. 15, 1949; lowest 5.29 below lsd, Jan. 31, 1951. Records available: 1947-51.

Jan. 5	5.19	Mar. 26	3.99	July 26	3.57	Oct. 23	3.79
31	5.29	Apr. 26	3.08	Aug. 24	3.90	Nov. 23	4.02
Feb. 21	5.25	May 28	3.34	Sept. 25	4.14	Dec. 27	4.00

16-3-27cc. Paul Pearson. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 22 inches, depth 28 feet. Land-surface datum is 1,543.99 feet above msl. Highest water level 4.05 below lsd, Mar. 7, 1949; lowest 9.84 below lsd, Nov. 1, 1934. Records available: 1934-42, 1944-51. Jan. 9, 6.53; Mar. 15, 6.24; May 7, 5.72.

## **Morrill County**

18-52-11dd. J. Barden. Drilled irrigation water-table well in coarse gravel of Pleistocene age, diameter 18 inches. Highest water level 23.49 below lsd, Sept. 18, 1951; lowest 24.72 below lsd, May 18, 1951. Records available: 1949-51. Mar. 21, 23.66; May 18, 24.72; Sept. 18, 23.49.

19-49-23cc. W. E. Guthrie Estate. Drilled irrigation water-table well in gravel of Pleistocene age, diameter 24 inches, depth 60 feet. Highest water level 9.33 below lsd, Aug. 20, 1950; lowest 11.95 below lsd, May 9, 1950. Records available: 1936-42, 1944, 1948-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	11.53	Apr. 18	11.90	July 20	11.26	Sept. 18	10.43
Feb. 21	11.68	May 18	10.68	Aug. 17	9.51	Oct. 15	11.01
Mar. 21	11.80	June 16	10.98	Sept. 7	9.92	Nov. 16	11.31
Apr. 16	11.89						

19-50-30cd. P. Reuter. Drilled irrigation water-table well in gravel of Pleistocene age, diameter 24 inches, depth 81 feet. Highest water level 23.06 below lsd, Jan. 27, 1950; lowest 24.18 below lsd, July 12, 1949. Records available: 1949-51. Jan. 18, 23.49; Mar. 21, 23.47; May 18, 23.41; July 20, 23.78; Sept. 18, 23.65.

20-49-30ac. Arnold Stewart. Drilled observation water-table well in sand of Pleistocene age, diameter 6 inches, depth 56 feet. Highest water level 15.22 below lsd, Nov. 21, 1949; lowest 21.22 below lsd, June 11, 1946. Records available: 1946-51. Feb. 21, 19.17; Apr. 18, 19.89; Sept. 7, 18.06.

20-50-28bb. Fred Smith. Drilled unused water-table well in sand and gravel of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 35 feet. Highest water level 11.87 below lsd, Sept. 7, 1951; lowest 15.57 below lsd, Aug. 16, 1950. Records available: 1934-42, 1944-51.

Jan. 18	13.89	Apr. 18	13.95	July 20	13.69	Sept. 18	13.50
Feb. 21	13.87	May 18	13.55	Aug. 17	13.72	Oct. 15	13.40
Mar. 21	14.07	June 16	13.71	Sept. 7	11.87	Nov. 16	13.61
Apr. 16	14.13						

20-50-32aa. U. S. Geol. Survey. Formerly State of Nebraska. Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 6 inches, depth 7 feet. Land-surface datum is 3,666.02 feet above msl. Highest water level 2.00 below lsd, May 14, 1942; lowest 5.80 below lsd, June 10, 1948. Records available: 1930-51. Measurements from Jan. 2 through Aug. 22, 1951, made by State Dept. of Roads and Irrigation.

22-50-14bc. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Highest water level 0.06 above lsd, May 9, 1949; lowest 2.33 below lsd, Aug. 13, 1946. Records available: 1946-51. Apr. 18, 0.73; Sept. 6, 0.73.

22-50-28bc. Mrs. Jessie Jensen. Drilled unused water-table well in sandstone of Arikaree formation of Tertiary age, diameter 6 inches, depth 91 feet. Highest water level 79.70 below lsd, Sept. 7, 1951; lowest 83.03 below lsd, Feb. 19, 1951. Records available: 1934-42, 1944, 1946-51. Feb. 19, 83.03; Apr. 18, 79.93; Sept. 7, 79.70.

#### Nance County

15-7-6bb. Owner unknown. Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 3 inches, depth 81 feet. Highest water level 63.88 below lsd, Mar. 28, 1950; lowest 66.00 below lsd, Sept. 30, 1948. Records available: 1948-51. Jan. 4, 65.30; Jan. 30, 65.36; Feb. 21, 65.33; Mar. 30, 65.32; Apr. 26, 65.34; May 28, 65.35.

16-4-31bc. U. S. Geol. Survey. Driven observation water-table well in sand and gravel of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Highest water level 3.08 below lsd, Apr. 22, 1949; lowest 6.76 below lsd, Jan. 13, 1948. Records available: 1948-51. Aug. 20, 5.42.

16-6-14ac. C. A. Aldrich. Drilled irrigation water-table well in gravel of Pleistocene age, diameter 10 inches, depth 51 feet. Land-surface datum is 1,642.19 feet above msl. Highest water level 25.24 below lsd, July 1, 1949; lowest 30.84 below lsd, Oct. 26, 1940. Records available: 1936-37, 1939-42, 1947-51. Jan. 4, 26.05; Mar. 30, 26.26; Feb. 21, 26.52; Mar. 30, 26.27; Apr. 26, 25.92; May 28, 25.97; Nov. 5, 26.11.

17-4-24db. Greek Estate. Drilled unused water-table well in sand of Pleistocene age, diameter 6 inches, depth 20 feet. Land-surface datum is 1,546 feet above msl. Highest water level 2.18 below lsd, Mar. 21, 1936; lowest 6.54 below lsd, Feb. 23, 1951. Records available: 1934-42, 1948-51. Jan. 2, 6.23; Feb. 23, 6.54; May 4, 6.16.

17-4-25dc. Loup River Public Power District. Driven observation water-table well in sand and gravel of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 18 feet. Highest water level 9.28 below lsd, Apr. 26, 1949; lowest 12.08 below lsd, Sept. 28, 1948. Records available: 1948-51. Jan. 31, 11.47; Feb. 21, 11.11; Mar. 26, 10.58; Apr. 26, 10.53; May 28, 10.65; Aug. 20, 11.21.

17-5-35dd. Loup River Public Power District. Driven observation water-table well in sand and gravel of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 16 feet. Highest water level 3.52 below lsd, July 25, 1950; lowest 6.72 below lsd, Sept. 28, 1948. Records available: 1948-51. Jan. 2, 5.37; Feb. 20, 5.56; May 4, 4.09; Aug. 20, 5.19; Nov. 5, 5.47; Dec. 27, 5.56.

17-6-34ad. Wm. Christiansen. Drilled domestic water-table well in sand and gravel of Pleistocene age, diameter 3 inches, depth 77 feet. Highest water level 40.30 below lsd, May 24, 1950; lowest 45.15 below lsd, Oct. 31, 1942. Records available: 1935-42, 1948-51. Feb. 19, 42.80; May 4, 42.98; Aug. 13, 42.58; Dec. 27, 43.08.

17-7-1ad. Mrs. Anderson. Drilled domestic water-table well in sand of Pleistocene age, diameter 4 inches, depth 58 feet. Highest water level 36.54 below lsd, Nov. 5, 1951; lowest 41.56 below lsd, Nov. 1, 1949. Records available: 1949-51. Feb. 19, 38.10; May 8, 37.44; Aug. 13, 37.78; Nov. 5, 36.54; Dec. 27, 37.50.

18-4-19ab. Homer Peterson. Drilled stock water-table well in sand of Pleistocene age, diameter 4 inches, depth 42 feet. Highest water level 6.05 below lsd, July 25, 1950; lowest 12.21 below lsd, Sept. 28, 1948. Records available: 1948-51. Jan. 2, 10.84; Feb. 20, 10.76; May 4, 7.91; Aug. 22, 7.98; Nov. 5, 10.55; Dec. 27, 10.69.

#### Nuckolls County

1-5-31cb. U. S. Geol. Survey. Drilled observation water-table well in sand and gravel of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 23 feet. Highest water level 15.89 below lsd, June 25, 1951; lowest 20.43 below lsd, Nov. 2, 1948. Records available: 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 19	17.94	June 25	15.89	Sept. 28	16.17	Dec. 3	16.24
May 23	16.90	Aug. 30	16.29	Oct. 31	16.19	Dec. 27	16.57

1-6-30dd. Marion Day. Drilled observation water-table well in sand of Pleistocene age, diameter 6 inches, depth 48 feet. Highest water level 31.63 below lsd, Dec. 29-31, 1951; lowest 33.60 below lsd, Mar. 1, 1947. Records available: 1946-51.

1-6-30dd--Continued.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	32.85	32.84	32.83	32.80	32.64	32.65	32.49	32.21	32.09	31.96	31.83	31.75
2	32.85	32.83	32.82	32.80	32.64	32.65	32.48	32.21	32.09	31.96	31.83	31.74
3	32.84	32.82	32.82	32.80	32.74	32.65	32.47	32.21	32.08	31.95	31.82	31.76
4	32.85	32.82	32.83	32.80	32.73	32.64	32.46	32.21	32.08	31.94	31.81	31.75
5	32.85	32.83	32.82	32.80	32.73	32.64	32.48	32.21	32.07	31.95	31.81	31.73
6	32.86	32.83	32.82	32.80	32.73	32.63	32.47	32.22	32.07	31.95	31.81	31.72
7	32.86	32.85	32.83	32.79	32.73	32.67	32.46	32.22	32.06	31.95	31.80	31.72
8	32.85	32.85	32.83	32.79	32.72	32.66	32.45	32.22	32.05	31.94	31.80	31.72
9	32.84	32.85	32.83	32.80	32.70	32.66	32.45	32.23	32.05	31.93	31.80	31.74
10	32.84	32.84	32.83	32.79	32.69	32.65	32.44	32.22	32.04	31.92	31.79	31.74
11	32.84	32.83	32.83	32.79	32.69	32.65	32.43	32.21	32.03	31.91	31.79	31.73
12	32.83	32.83	32.84	32.79	32.68	32.64	32.43	32.20	32.03	31.90	31.78	31.71
13	32.83	32.84	32.83	32.79	32.67	32.63	32.43	32.19	32.04	31.89	31.77	31.71
14	32.84	32.85	32.83	32.78	32.67	32.60	32.42	32.18	32.03	31.89	31.76	31.70
15	32.85	32.86	32.83	32.78	32.72	32.58	32.41	32.17	32.03	31.91	31.76	31.70
16	32.85	32.85	32.81	32.78	32.76	32.58	32.40	32.16	32.02	31.88	31.78	31.70
17	32.84	32.84	32.81	32.78	32.72	32.57	32.39	32.15	32.04	31.89	31.78	31.70
18	32.84	32.84	32.81	32.77	32.71	32.56	32.38	32.15	32.00	31.90	31.78	31.69
19	32.83	32.84	32.81	32.78	32.71	32.55	32.37	32.15	31.99	31.90	31.77	31.69
20	32.85	32.84	32.81	32.78	32.70	32.55	32.37	32.15	31.98	31.88	31.76	31.69
21	32.85	32.84	32.80	32.77	32.64	32.57	32.37	32.15	31.98	31.88	31.75	31.68
22	32.85	32.84	32.79	32.78	32.65	32.56	32.37	32.14	31.97	31.88	31.76	31.68
23	32.84	32.84	32.78	32.78	32.65	32.55	32.37	32.14	31.97	31.87	31.75	31.68
24	32.84	32.83	32.78	32.77	32.65	32.54	32.37	32.14	31.98	31.86	31.75	31.68
25	32.84	32.83	32.79	32.87	32.65	32.53	32.37	32.13	31.98	31.85	31.74	31.69
26	32.82	32.83	32.80	32.67	32.65	32.52	32.27	32.13	31.85	31.74	31.68	
27	32.82	32.83	32.80	32.66	32.65	32.51	31.34	32.12	31.85	31.74	31.67	
28	32.83	32.83	32.80	32.66	32.64	32.51	32.11	32.12	32.01	31.84	31.75	31.66
29	32.84		32.80	32.65	32.64	32.50	32.19	32.11	31.98	31.83	31.76	31.63
30	32.85		32.80	32.65	32.63	32.50	32.19	32.10	31.97	31.83	31.76	31.63
31	32.84		32.80		32.66		32.21	32.09		31.83		31.63

1-7-32bb. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 13 feet. Highest water level 0.09 below lsd, June 26, 1951; lowest 4.95 below lsd, Sept. 24, 1948. Records available: 1947-51. Apr. 24, 0.71; May 28, 0.73; June 26, 0.09; July 24, 0.20; Aug. 22, 0.90; Oct. 1, 0.79; Oct. 25, 0.95.

1-8-7dd. U. S. Geol. Survey. Drilled observation water-table well in loess of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Highest water level 0.47 below lsd, May 24, 1951; lowest 6.35 below lsd, Sept. 24, 1948. Records available: 1946-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water
Apr. 24	0.51	July 30	1.50	Sept. 27	2.19	Nov. 29	0.91
May 24	.47	Aug. 29	1.44	Oct. 30	.89	Dec. 26	3.18
June 20	.96						

1-8-23ab. U. S. Geol. Survey. Drilled observation water-table well in silt, loess, and clay of Pleistocene age, diameter 8 inches, depth 18 feet. Land-surface datum is 1,598.45 feet above msl. Highest water level 0.02 below lsd, July 29, 1951; lowest 7.91 below lsd, July 8-9, 1950. Records available: 1950-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.82	6.31	4.15	4.90	....	3.24	2.04	0.86	3.73	2.66	3.21	3.63
2	5.82	6.31	4.13	4.93	....	3.24	2.05	1.73	3.61	2.70	3.21	3.61
3	5.80	6.32	4.16	4.94	3.52	....	2.22	1.72	3.55	2.73	....	3.67
4	5.84	6.34	4.19	4.96	3.64	....	2.34	1.18	3.54	2.52	....	3.63
5	5.86	6.37	4.34	4.97	3.69	....	2.36	1.37	.80	2.57	....	3.63
6	5.92	6.39	4.40	4.99	3.73	.59	2.40	1.57	1.00	2.51	....	3.64
7	5.91	6.44	4.52	4.99	3.78	.64	2.51	1.76	....	2.34	....	3.72
8	5.90	6.40	4.60	5.00	3.82	.84	2.72	1.96	....	2.38	3.30	3.73
9	5.91	6.44	4.62	5.01	3.87	1.02	2.81	2.15	....	2.47	3.35	3.75
10	5.97	6.44	4.72	5.06	3.92	1.02	2.84	2.23	....	2.50	3.36	3.73
11	5.97	6.45	4.81	5.06	3.94	1.02	.50	2.33	....	2.56	3.35	3.73
12	5.98	6.47	4.82	5.07	3.96	1.10	.66	2.40	....	2.62	3.30	3.76
13	6.02	6.52	4.87	5.07	3.98	1.15	.54	2.51	1.79	2.71	3.39	3.78
14	6.02	6.53	4.92	5.10	4.00	1.35	.59	2.51	1.91	2.75	3.43	3.79
15	6.02	6.50	4.94	5.13	4.02	1.19	.64	2.30	1.91	2.51	3.45	3.79

## 1-8-23ab--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	6.03	6.49	4.93	5.14	4.05	0.85	0.73	2.38	1.54	2.86	3.46	....
17	6.05	6.49	4.98	5.12	4.07	.87	.84	2.63	1.64	2.89	3.46	....
18	6.09	6.51	5.00	5.17	4.07	....	.95	2.71	1.83	2.98	....	....
19	6.09	6.52	5.00	5.21	4.07	....	1.33	2.70	1.95	2.98	....	....
20	6.11	6.56	4.02	5.21	4.07	....	1.62	2.62	2.13	2.90	....	3.96
21	6.11	6.54	4.03	4.90	4.07	....	1.91	2.71	....	3.01	3.56	3.98
22	6.08	6.55	5.00	4.54	3.37	....	1.97	2.73	....	3.03	3.59	....
23	6.13	6.55	5.07	4.36	2.67	....	1.03	2.69	....	3.01	3.63	....
24	6.18	6.50	5.07	4.40	2.10	....	.97	2.64	2.33	2.99	3.64	....
25	6.16	6.36	5.06	4.40	2.34	1.16	.92	2.60	2.33	3.03	3.56	....
26	6.14	6.19	5.06	3.77	2.55	1.22	.87	2.71	2.49	3.07	3.55	4.17
27	6.17	6.03	5.05	3.76	2.74	1.25	.38	2.73	2.57	3.04	3.53	4.12
28	6.24	5.09	3.77	2.83	1.69	.22	2.26	2.60	2.84	3.55	4.12	....
29	6.26	5.07	3.81	2.97	1.74	.02	2.40	2.63	2.86	3.62	4.17	....
30	6.27	4.88	3.81	3.03	1.93	.30	2.49	2.65	3.04	3.61	4.17	....
31	6.28	4.85	3.08	3.08	.58	3.68	3.07	4.22	....	....	....	....

Phelps County

5-18-2cc. C. M. Brown. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 185 feet. Land-surface datum is 2,326.84 feet above msl. Highest water level 156.12 below lsd, May 24, 1951; lowest 159.81 below lsd, Sept. 8, 1948. Records available: 1947-51. Jan. 24, 157.10; Mar. 16, 156.34; May 24, 156.12; Oct. 22, 156.62.

5-19-22da. Drilled unused water-table well in sand of Pleistocene age, diameter 12 inches, depth 246 feet. Land-surface datum is 2,378.81 feet above msl. Highest water level 202.09 below lsd, Dec. 28, 1951; lowest 204.64 below lsd, Sept. 13, 1949. Records available: 1947-51.

## Daily lowest water level from recorder graph\*

Day	Jan.	Feb.	Mar.	Apr.	May	Oct.	Nov.	Dec.
1	202.91	202.73	202.86	202.87	202.59	....	202.92	202.38
2	202.83	202.51	202.29	202.92	202.84	....	202.92	202.23
3	202.92	202.46	202.60	202.67	202.96	....	202.61	202.49
4	203.20	202.67	202.82	202.62	202.90	....	202.61	202.40
5	203.33	202.36	202.45	202.53	202.77	....	202.78	202.29
6	203.42	202.45	202.70	202.61	203.01	....	202.72	202.75
7	203.19	202.80	202.90	202.69	202.73	....	202.72	203.27
8	202.99	202.62	203.23	202.65	202.43	....	202.40	203.27
9	202.80	202.72	202.76	202.60	202.48	....	202.55	203.15
10	203.01	202.63	202.65	202.71	202.72	....	202.60	202.74
11	202.85	202.46	203.03	202.82	202.65	....	202.40	202.62
12	202.90	202.57	202.85	202.78	202.54	....	202.10	202.51
13	203.03	203.12	202.55	202.43	202.51	....	202.45	202.51
14	202.93	203.07	202.60	202.43	202.61	....	202.65	203.05
15	203.04	202.60	202.90	202.90	202.78	....	203.04	203.09
16	202.75	202.45	202.26	202.69	202.77	....	203.30	202.57
17	202.64	202.47	202.50	202.32	202.58	....	203.30	202.60
18	202.72	202.50	202.94	202.35	202.57	....	202.82	202.61
19	202.98	202.62	202.80	202.80	202.60	....	202.55	202.29
20	203.53	202.88	202.81	202.69	202.60	....	202.32	202.48
21	203.47	202.80	202.51	202.72	202.57	....	202.47	202.63
22	202.74	202.82	202.25	202.94	202.82	....	202.67	202.82
23	202.97	202.78	202.46	202.43	202.52	202.79	202.80	202.99
24	203.13	202.56	202.88	202.95	202.43	202.68	202.80	202.79
25	202.72	202.51	202.78	202.63	....	202.67	202.76	203.04
26	202.33	202.63	202.42	202.56	....	202.87	202.78	203.14
27	202.82	202.39	202.33	202.52	....	202.87	202.61	202.89
28	203.16	202.37	202.56	202.36	....	202.54	202.60	202.09
29	203.12	202.79	202.28	....	....	202.33	202.61	202.16
30	202.82	202.76	202.32	....	....	202.90	202.52	202.16
31	202.79	202.77	....	....	....	202.90	202.99	....

\* No record for June, July, August, and September.

5-20-16dc. Owner unknown. Drilled unused water-table well in sand of Pleistocene age, diameter 5 inches, depth 45 feet. Land-surface datum is 2,270.56 feet above msl. Highest water level 37.29 below lsd, July 25, 1950; lowest 39.95 below lsd, July 22, 1948. Records available: 1948-51. Mar. 16, 37.76; Aug. 16, 37.42; Oct. 23, 39.91.

6-17-15ad. Carl Rumste. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 170 feet. Land-surface datum is 2,253.60 feet above msl. Highest water level 79.69 below lsd, Oct. 22, 1951; lowest 90.08 below lsd, Aug. 6, 1947. Records available: 1947-51. Jan. 23, 81.52; Mar. 16, 81.24; May 24, 80.86; Oct. 22, 79.69.

6-19-2aa. Central Nebraska Public Power and Irrigation District. Drilled observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 151 feet. Land-surface datum is 2,360.81 feet above msl. Highest water level 100.58 below lsd, Oct. 24, 1951; lowest 123.70 below lsd, Mar. 9, 1945. Records available: 1945-51. Jan. 24, 103.39; Mar. 16, 102.47; May 24, 102.30; Aug. 15, 110.48; Oct. 24, 100.58.

6-19-21dc. Owner unknown. Drilled unused water-table well in sand of Pleistocene age, diameter 4 inches, depth 165 feet. Land-surface datum is 2,375.99 feet above msl. Highest water level 145.71 below lsd, Oct. 23, 1951; lowest 152.60 below lsd, Sept. 26, 1950. Records available: 1948-51. Jan. 24, 147.09; Mar. 16, 146.52; May 24, 146.32; Aug. 16, 145.95; Oct. 23, 145.71.

7-18-3cc. Central Nebraska Public Power and Irrigation District. Drilled observation water-table well in sand of Pleistocene age, diameter 4 inches, depth 85 feet. Land-surface datum is 2,314.29 feet above msl. Highest water level 56.91 below lsd, Aug. 16, 1951; lowest 80.85 below lsd, May 15, 1948. Records available: 1948-51. Jan. 25, 74.76; Mar. 16, 74.78; May 24, 74.98; Aug. 16, 56.91; Oct. 22, 68.80.

7-18-35ab. Anderson. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 123 feet. Land-surface datum is 2,281.53 feet above msl. Highest water level 64.00 below lsd, Oct. 22, 1951; lowest 72.74 below lsd, May 12, 1948. Records available: 1948-51. Jan. 24, 66.50; Mar. 16, 66.13; May 24, 65.66; Aug. 16, 64.72; Oct. 22, 64.00.

7-20-28dc. Albert Dahlgren. Drilled unused water-table well in sand of Pleistocene age, diameter 3 inches, depth 172 feet. Land-surface datum is 2,450.14 feet above msl. Highest water level 153.01 below lsd, May 24, 1951; lowest 171.72 below lsd, Nov. 15, 1934. Records available: 1934-36, 1948-51. Jan. 25, 154.55; Mar. 16, 153.27; May 24, 153.01; Aug. 15, 154.07.

8-17-24bc. F. R. Skiles. Drilled irrigation water-table well in gravel of Pleistocene age, diameter 24 inches, depth 43 feet. Land-surface datum is 2,187.39 feet above msl. Highest water level 7.60 below lsd, July 8, 1949; lowest 12.23 below lsd, Oct. 27, 1940. Records available: 1930-51. Jan. 13, 8.92; Mar. 30, 8.55; May 11, 8.39; Oct. 22, 8.63.

8-18-16cc. Gus A. Nelson. Drilled irrigation water-table well in sand of Pleistocene age, diameter 24 inches, depth 38 feet. Land-surface datum is 2,251.87 feet above msl. Highest water level 6.02 below lsd, July 15, 1947; lowest 9.26 below lsd, Aug. 9, 1946. Records available: 1948-51. Jan. 13, 7.08; Mar. 30, 6.88; May 11, 6.23; Aug. 8, 6.35; Oct. 22, 6.78.

8-19-18aa. Central Nebraska Public Power and Irrigation District. Drilled observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 9 feet. Highest water level 1.24 below lsd, Mar. 12, 1949; lowest 3.52 below lsd, July 7, 1950. Records available: 1949-51. Jan. 13, 2.79; Mar. 30, 2.72; May 10, 3.13; Aug. 8, 3.41.

8-19-33cc. Central Nebraska Public Power and Irrigation District. Drilled observation water-table well in sand of Pleistocene age, diameter 4 inches, depth 117 feet. Land-surface datum is 2,350.97 feet above msl. Highest water level 44.93 below lsd, Oct. 23, 1951; lowest 51.70 below lsd, May 10, 1948. Records available: 1948-51. Jan. 25, 45.45; Mar. 16, 45.03; May 24, 45.26; Aug. 15, 45.00; Oct. 23, 44.93.

8-20-8cd. Mrs. A. D. Matson. Drilled irrigation water-table well in sand of Pleistocene age, diameter 24 inches, depth 48 feet. Land-surface datum is 2,337.85 feet above msl. Highest water level 3.97 below lsd, Sept. 11, 1950; lowest 8.90 below lsd, Aug. 9, 1946. Records available: 1948-51. Jan. 13, 5.56; Mar. 30, 5.76; May 10, 5.14; Oct. 24, 8.15.

#### Platte County

A17-1-17dd. Loup River Public Power District. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 26 feet. Land-surface datum is 1,436.4 feet above msl. Highest water level 5.20 below lsd, July 30, 1945; lowest 10.90 below lsd, Oct. 27, 1950. Records available: 1935-40, 1942-51. Jan. 9, 9.57; Mar. 15, 9.12; May 8, 8.02; Aug. 14, 8.23.

A17-1-36bc. Loup River Public Power District. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 17 feet. Land-surface datum is 1,412.8 feet above msl. Highest water level 3.80 below lsd, July 30, 1945, July 30, 1946; lowest 8.10 below lsd, June 10, 1946. Records available: 1935-40, 1942-51. Jan. 9, 5.97; Mar. 15, 4.94; May 8, 3.89; Aug. 14, 5.03; Nov. 1, 4.94.

A18-1-28cd. Loup River Public Power District. Drilled observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 99 feet. Land-surface datum is 1,511.8 feet above msl. Highest water level 60.30 below lsd, Mar. 27, Apr. 24, 1940; lowest 70.73 below lsd, July 30, 1937. Records available: 1935-40, 1942-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	69.76	Apr. 26	70.09	Aug. 25	63.92	Nov. 23	70.34
Feb. 21	70.08	July 3	70.27	Sept. 25	70.32	Dec. 24	70.26
Mar. 26	69.99	26	70.21	Oct. 23	70.31		

16-2-9cc. John F. Nyffeler. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 38 feet. Land-surface datum is 1,508.17 feet above msl. Highest water level 0.39 below lsd, Apr. 15, 1949; lowest 4.80 below lsd, Sept. 4, 1946. Records available: 1946-51. Jan. 9, 3.65; Mar. 15, 2.96; May 8, 2.75.

16-2-12ab. Herman Ernst. Driven domestic water-table well in sand and gravel of Pleistocene age, diameter 1½ inches, depth 17 feet. Land-surface datum is 1,488.63 feet above msl. Highest water level 6.24 below lsd, Apr. 15, 1949; lowest 11.79 below lsd, Nov. 21, 1939. Records available: 1934-42, 1944-51. Jan. 9, 9.24; Mar. 15, 8.70; May 8, 7.60.

17-1-2cc. Loup River Public Power District. Driven observation water-table well in sand of Pleistocene age, diameter 1½ inches, depth 22 feet. Land-surface datum is 1,488.4 feet above msl. Highest water level 6.80 below lsd, Apr. 13, 1942; lowest 13.29 below lsd, Oct. 8, 1936. Records available: 1935-40, 1942-51. Jan. 3, 10.56; Feb. 23, 10.56; May 5, 9.88; Aug. 21, 10.04; Nov. 1, 10.31.

17-1-34dc. J. C. Ernst. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 65 feet. Land-surface datum is 1,458.86 feet above msl. Highest water level 6.29 below lsd, July 7, 1947; lowest 9.47 below lsd, Nov. 3, 1950. Records available: 1945-51. Jan. 9, 9.00; Mar. 15, 8.58; May 8, 8.18.

17-2-2cd. Ernest Schacher. Driven observation water-table well in sand and gravel of Pleistocene age, diameter 3 inches, depth 44 feet. Land-surface datum is 1,480.34 feet above msl. Highest water level 4.58 below lsd, July 8, 1947; lowest 8.80 below lsd, Oct. 23, 1936. Records available: 1934-42, 1946-51. Jan. 3, 6.64; Feb. 23, 6.71; May 5, 4.81; Nov. 1, 7.71.

17-2-6bd. Loup River Power District. Driven observation water-table well in sand of Pleistocene age, diameter 1½ inches, depth 23 feet. Highest water level 12.53 below lsd, June 6, 1949; lowest 14.53 below lsd, Aug. 8, 1949. Records available: 1948-51. Jan. 3, 14.02; Feb. 23, 13.94; May 5, 13.37; Aug. 21, 13.42; Nov. 1, 13.85.

17-3-23ad. Owner unknown. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 48 feet. Highest water level 13.55 below lsd, July 6, 1949; lowest 16.00 below lsd, Dec. 27, 1951. Records available: 1947-51.

Apr. 24	14.34	Aug. 23	15.32	July 26	15.34	Oct. 23	15.70
May 26	15.18	Oct. 10	15.55	Aug. 24	15.39	Nov. 23	15.87
June 23	15.21	Nov. 3	15.62	Sept. 25	15.51	Dec. 27	16.00
July 26	15.27	28	15.81				

#### Polk County

13-4-27bb. Owner unknown. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 142 feet. Highest water level 60.77 below lsd, Mar. 15, 1950; lowest 69.90 below lsd, Oct. 18, 1949. Records available: 1949-50. Oct. 18, 1949, 69.90; Mar. 15, 1950, 60.77. No measurement made in 1951.

14-4-19ab. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter 1½ inches, depth 13 feet. Land-surface datum is 1,626.55 feet above msl. Highest water level 2.32 below lsd, Mar. 7, 1949; lowest 6.02 below lsd, Sept. 3, 1947. Records available: 1946-51. Jan. 8, 4.47; Mar. 13, 4.23; May 2, 3.57; Oct. 30, 2.88.

15-2-7bb. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter 1½ inches, depth 13 feet. Land-surface datum is 1,529.26 feet above msl. Highest water level 5.28 below lsd, Apr. 19, 1949; lowest 8.43 below lsd, Nov. 10, 1947. Records available: 1946-51. Jan. 8, 8.12; Mar. 13, 7.48; May 2, 6.20; Aug. 23, 7.56; Oct. 31, 8.42.

15-3-20cc. Ray Norris. Drilled irrigation water-table well in sand of Pleistocene age, diameter 12 inches, depth 21 feet. Land-surface datum is 1,582.83 feet above msl. Highest water level 4.31 below lsd, Apr. 20, 1949; lowest 7.63 below lsd, Nov. 10, 1947. Records available: 1946-51. Jan. 8, 7.15; Mar. 13, 6.53; May 2, 5.16; Oct. 30, 6.70.

16-1-14bb. Joe Czafla. Drilled observation water-table well in sand of Pleistocene age, diameter 1 $\frac{1}{2}$  inches, depth 13 feet. Land-surface datum is 1,457.75 feet above msl. Highest water level 3.72 below lsd, July 7, 1947; lowest 6.38 below lsd, Sept. 3, 1946. Records available: 1946-51. Jan. 8, 5.68; Mar. 13, 5.67; May 2, 5.58; Oct. 31, 5.35.

16-2-23dc. Rudolph Nitsch. Drilled irrigation water-table well in sand of Pleistocene age, diameter 24 inches, depth 40 feet. Land-surface datum is 1,498.28 feet above msl. Highest water level 5.92 below lsd, July 7, 1947; lowest 8.24 below lsd, Nov. 10, 1947. Records available: 1946-51. Jan. 8, 7.93; Mar. 13, 7.45; May 2, 6.71; Aug. 23, 7.55; Oct. 31, 7.56.

#### Redwillow County

2-29-4ad. Rex S. Haberman. Drilled unused water-table well in sand of Pleistocene age, diameter 26 inches, depth 40 feet. Highest water level 27.78 below lsd, Sept. 25-Oct. 5, 1951; lowest 31.07 below lsd, Aug. 16, 1951. Records available: 1950-51.

#### Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	J'yly	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.41	.....	.....	28.34	28.26	28.18	28.05	27.95	28.48	27.78	27.87	28.02
2	28.41	.....	.....	28.34	28.26	28.18	28.05	27.95	28.47	27.78	27.88	28.02
3	28.42	.....	.....	28.33	28.26	28.18	28.05	27.96	28.46	27.78	27.88	28.02
4	28.42	.....	.....	28.32	28.26	28.17	28.05	27.97	28.45	27.78	27.89	28.03
5	28.42	.....	.....	28.49	28.32	28.26	28.17	28.05	27.99	28.40	27.78	27.90
6	28.42	.....	28.49	28.32	28.27	28.16	28.04	28.00	28.37	27.79	27.91	28.03
7	28.43	.....	28.48	28.32	28.27	28.16	28.04	28.05	28.33	27.79	27.92	28.03
8	28.43	.....	28.47	28.31	28.27	28.16	28.04	28.32	28.27	27.78	27.92	28.04
9	28.43	.....	28.45	28.31	28.28	28.12	28.05	30.49	28.18	27.79	27.92	28.05
10	28.43	.....	28.45	28.30	28.28	28.12	28.06	29.98	28.12	27.79	27.93	28.06
11	28.43	.....	28.44	28.30	28.27	28.12	28.07	0.12	28.06	27.79	27.93	28.06
12	28.43	.....	28.44	28.29	28.27	28.12	28.07	29.86	28.00	27.79	27.93	28.06
13	.....	.....	28.43	28.29	28.26	28.12	28.07	28.48	27.96	27.79	27.93	28.06
14	.....	.....	28.42	28.28	28.26	28.13	28.06	30.10	27.93	27.79	27.94	28.06
15	.....	.....	28.42	28.28	28.27	28.13	28.04	31.02	27.90	27.79	27.95	28.07
16	.....	.....	28.41	28.28	28.27	28.12	28.03	31.07	27.87	27.79	27.96	28.07
17	.....	.....	28.41	28.28	28.26	28.12	28.02	29.74	27.85	27.79	27.97	28.07
18	.....	.....	28.41	28.27	28.26	28.12	28.02	29.18	27.84	27.80	27.97	28.07
19	.....	.....	28.41	28.27	28.26	28.11	28.00	28.94	27.82	27.80	27.97	28.07
20	.....	.....	28.40	28.27	28.25	28.10	28.00	28.75	27.80	27.81	27.98	28.07
21	.....	.....	28.40	28.26	28.25	28.10	27.97	28.69	27.80	27.81	27.98	28.08
22	.....	.....	28.39	28.26	28.23	28.10	27.95	28.66	27.80	27.81	27.98	28.08
23	.....	.....	28.39	28.25	28.22	28.09	27.95	28.61	27.79	27.82	27.98	28.09
24	.....	.....	28.38	28.25	28.22	28.08	27.98	28.57	27.79	27.82	27.99	28.10
25	.....	.....	28.38	28.25	28.22	28.08	27.98	28.54	27.78	27.82	28.00	28.11
26	.....	.....	28.37	28.25	28.21	28.08	27.97	28.52	27.78	27.83	28.01	28.12
27	.....	.....	28.36	28.24	28.21	28.07	27.96	28.51	27.78	27.84	28.01	.....
28	.....	.....	28.36	28.24	28.20	28.06	27.96	28.50	27.78	27.84	28.02	.....
29	.....	.....	28.35	28.24	28.19	28.05	27.95	28.49	27.78	27.85	28.02	.....
30	.....	.....	28.35	28.26	28.18	28.05	27.95	28.48	27.78	27.85	28.02	.....
31	.....	.....	28.34	.....	28.18	.....	27.96	28.48	.....	27.85	.....	.....

3-27-17cb. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter 1 $\frac{1}{2}$  inches, depth 16 feet. Land-surface datum is 2,366.88 feet above msl. Highest water level 8.27 below lsd, Oct. 10, 1951; lowest 10.85 below lsd, Oct. 6, 1947. Records available: 1946-51. May 2, 9.40; June 2, 8.55; Oct. 10, 8.27.

3-28-20bb2. Leo D. England. Drilled irrigation water-table well in sand of Pleistocene age, diameter 14 inches, depth 36 feet. Highest water level 5.53 below lsd, Sept. 9, 10, 1951; lowest 7.86 below lsd, Nov. 1, 2, 1950. Records available: 1950-51.

#### Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.23	.....	.....	6.96	6.83	6.93	6.68	6.74	6.95	6.30	6.81	6.79
2	7.18	.....	.....	6.98	6.95	6.95	6.75	6.79	6.96	6.32	6.80	6.77
3	7.21	.....	.....	6.95	6.94	6.95	6.78	6.79	6.69	6.35	6.80	6.83
4	7.24	.....	.....	6.93	6.93	6.96	6.76	6.78	6.55	6.40	6.80	6.77
5	7.24	.....	6.96	6.93	6.97	6.95	6.75	6.78	5.90	6.43	6.82	6.77
6	7.25	.....	7.02	6.97	6.98	6.94	6.71	6.81	5.85	6.45	6.81	6.86
7	7.19	.....	7.04	6.97	6.98	6.97	6.67	6.79	5.85	6.48	6.81	6.90
8	7.16	.....	7.04	6.93	6.93	6.99	6.72	6.80	5.55	6.50	6.80	6.88
9	7.18	.....	7.00	6.92	7.02	6.87	6.74	6.81	5.53	6.50	6.81	6.87
10	7.20	.....	7.01	6.97	7.03	6.79	6.77	6.83	5.53	6.50	6.81	6.82

## 3-28-20bb2--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	7.15	....	7.02	6.95	7.03	6.68	6.75	6.83	5.65	6.51	6.77	6.81
12	7.17	....	7.02	6.92	7.05	6.54	6.70	6.85	5.68	6.51	6.73	6.82
13	....	....	6.94	6.92	7.10	6.54	6.48	6.86	5.75	6.57	6.81	6.82
14	....	....	6.95	6.96	7.12	6.54	6.42	6.81	5.80	6.58	6.82	6.91
15	....	....	6.95	6.97	7.13	6.51	6.46	6.70	5.84	6.56	6.85	6.91
16	....	....	6.97	6.97	7.11	6.55	6.49	6.65	5.84	6.62	6.87	6.82
17	....	....	7.01	6.87	7.07	6.58	6.50	6.68	5.90	6.62	6.87	6.83
18	....	....	7.01	6.95	7.05	6.57	6.45	6.68	5.93	6.66	6.78	6.84
19	....	....	6.98	6.95	7.07	6.56	6.33	6.68	5.97	6.65	6.78	6.80
20	....	....	6.92	6.95	7.06	6.55	6.36	6.76	6.06	6.60	6.75	6.79
21	....	....	6.95	7.00	6.91	6.56	6.45	6.76	6.08	6.67	6.82	6.79
22	....	....	6.95	7.00	6.82	6.59	6.44	6.76	6.08	6.69	6.84	6.80
23	....	....	7.02	6.92	6.75	6.59	6.44	6.75	6.15	6.69	6.85	6.81
24	....	....	7.00	6.92	6.76	6.57	6.45	6.77	6.16	6.67	6.85	6.75
25	....	....	6.96	6.97	6.82	6.56	6.49	6.78	6.16	6.73	6.86	6.80
26	....	....	6.93	6.95	6.82	6.60	6.54	6.80	6.25	6.75	6.86	6.80
27	....	....	6.94	6.93	6.85	6.70	6.57	6.82	6.27	6.73	6.83	6.68
28	....	....	6.98	6.90	6.90	6.76	6.59	6.85	6.27	6.71	6.82	....
29	....	....	6.97	6.86	6.91	6.67	6.64	6.85	6.27	6.70	6.83	....
30	....	....	6.95	6.90	6.88	6.70	6.70	6.89	6.30	6.80	6.81	....
31	....	....	6.96	6.95	6.95	6.72	6.93	6.72	6.93	6.73	....	....

3-29-32db. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 20 feet. Highest water level 4.54 below lsd, Aug. 13, 1950; lowest 7.85 below lsd, Oct. 6, 1948. Records available: 1940-44, 1946-51. May 4, 6.12; June 1, 5.67; July 6, 6.05; Aug. 20, 6.17; Oct. 11, 6.46; Dec. 26, 6.25.

3-30-29aa. U. S. Geol. Survey. Drilled observation water-table well in sand, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Land-surface datum is 2,512 feet above msl. Highest water level 1.92 below lsd, Apr. 7, 1949; lowest 5.06 below lsd, Oct. 9, 1947. Records available: 1946-51. June 7, 3.30; July 5, 3.40; Aug. 21, 3.63; Oct. 8, 3.17; Dec. 27, 3.20.

Rock County

30-17-8db. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 15 feet. Land-surface datum is 2,235.70 feet above msl. Highest water level 0.50 below lsd, Mar. 24, 1951; lowest 5.12 below lsd, Nov. 22, 1935. Records available: 1934-51. Feb. 13, 1.02; Mar. 24, 0.50; July 24, 1.42; Sept. 13, 0.92; Nov. 20, 1.12.

30-19-10aa. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 15 feet. Land-surface datum is 2,304.89 feet above msl. Highest water level 0.51 above lsd, June 29, 1951; lowest 4.23 below lsd, July 19, 1940. Records available: 1940, 1944-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 13	-0.40	Mar. 31	-0.34	June 29	+0.51	Sept. 28	+0.11
26	-.35	Apr. 30	+.44	July 31	+1.19	Oct. 31	+.24
Mar. 24	+.50	May 29	+.91	Aug. 29	+.06	Nov. 29	+.44

Saunders County

A13-9-24cc. City of Lincoln. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Land-surface datum is 1,065.22 feet above msl. Highest water level 0.48 below lsd, July 31, 1948; lowest 7.92 below lsd, Aug. 30, 1934. Records available: 1933-51.

Jan. 30	5.38	May 25	1.81	July 25	3.85	Oct. 25	4.75
Feb. 27	2.75	28	1.89	Aug. 24	1.35	Nov. 25	4.96
Apr. 25	1.40	June 25	2.12	Sept. 24	4.21	Dec. 25	4.84

A13-10-30ad. City of Lincoln. Drilled observation water-table well in gravel of Pleistocene age, diameter 8 inches, depth 20 feet. Land-surface datum is 1,166.01 feet above msl. Highest water level 4.52 below lsd, June 2, 1951; lowest 10.00 below lsd, Mar. 13, 14, 1951. Records available: 1950-51.

A13-10-30ad--Continued.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.99	8.18	7.50	7.80	6.68	5.53	7.68	9.44	8.82	9.03	8.53	8.53
2	7.12	8.26	7.58	8.11	6.93	4.52	7.81	9.46	8.88	9.05	8.49	8.50
3	7.14	8.25	7.65	8.12	7.13	5.25	7.83	9.51	8.88	9.13	8.57	8.46
4	6.94	8.35	7.84	8.15	7.37	5.80	6.74	9.61	8.98	9.13	8.60	8.42
5	6.80	8.35	7.90	8.19	7.50	6.07	6.94	9.65	8.91	8.41	....	8.44
6	6.95	8.29	7.89	8.11	7.74	6.26	6.62	9.68	8.73	8.11	....	8.49
7	7.18	8.00	7.93	8.11	7.90	6.34	7.25	9.81	8.67	8.30	....	8.42
8	7.25	7.62	7.98	7.99	8.10	7.08	7.77	9.95	8.35	8.30	....	8.44
9	7.26	7.57	8.58	7.85	8.06	7.51	8.36	9.98	8.17	8.31	8.36	8.53
10	7.31	7.57	8.67	7.92	7.98	7.85	8.49	9.89	7.91	8.45	8.49	8.56
11	7.26	7.44	9.17	8.02	8.15	7.87	8.49	9.75	8.14	8.58	8.51	8.48
12	7.28	7.34	9.69	8.18	8.18	7.62	8.48	9.31	8.07	8.68	8.50	8.72
13	7.34	7.24	10.00	8.17	8.30	7.95	8.23	9.16	7.63	8.78	8.61	8.67
14	7.21	7.08	10.00	8.19	8.28	8.10	7.91	8.88	7.21	8.74	8.55	9.25
15	7.16	7.08	9.50	8.14	8.23	7.96	7.88	7.18	7.59	8.72	8.51	8.53
16	7.08	6.98	9.41	8.19	8.28	7.65	8.13	7.22	7.91	8.67	8.51	8.56
17	6.96	6.90	8.72	8.25	8.24	7.93	8.37	7.24	8.18	8.12	8.50	8.54
18	6.89	6.96	8.19	8.28	7.74	7.73	8.40	7.95	8.39	8.60	9.01	8.40
19	6.78	6.96	8.18	8.37	7.46	7.83	8.32	8.45	8.56	8.57	9.03	8.43
20	6.87	6.96	8.14	8.37	7.23	7.37	8.95	8.45	8.66	8.54	8.83	8.43
21	6.90	6.96	8.08	8.21	6.89	7.46	8.30	6.88	8.77	8.44	8.84	8.40
22	7.00	6.84	8.11	7.77	6.65	7.88	8.39	6.86	8.81	8.21	8.81	8.37
23	6.96	6.60	7.89	7.73	6.73	8.14	8.43	7.44	8.89	8.46	8.74	....
24	7.16	6.35	6.73	7.76	6.83	8.17	8.67	7.54	8.84	8.48	8.75	....
25	7.28	6.36	6.74	7.55	6.91	8.02	8.66	7.96	8.79	8.53	8.77	....
26	7.31	6.83	6.55	7.73	7.11	7.79	8.80	8.31	8.90	8.52	8.85	....
27	7.45	7.66	6.34	7.65	7.36	7.78	8.86	8.29	8.94	8.53	8.85	7.94
28	7.45	7.50	6.21	7.59	7.54	7.72	9.07	8.10	8.94	8.51	8.74	7.95
29	7.50	6.89	6.90	7.72	7.73	9.22	8.17	8.95	8.50	8.56	7.91	....
30	7.66	7.17	7.03	7.97	7.35	9.28	8.29	8.94	8.42	8.53	7.92	....
31	....	7.53	....	7.84	....	9.35	8.61	8.46	....	7.84	....	....

A17-5-23bc. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter 1½ inches, depth 12 feet. Highest water level 3.67 below lsd, May 2, 1951; lowest 6.30 below lsd, June 28, 1950. Records available: 1950-51. Jan. 8, 5.63; Mar. 13, 5.78; May 2, 3.67; Aug. 15, 4.06; Oct. 31, 4.54.

Scotts Bluff County

22-54-32ab. B. J. Pieper. Drilled irrigation water-table well in coarse gravel of Pleistocene age, diameter 24 inches, depth 45 feet. Highest water level 7.59 below lsd, Aug. 28, 1937; lowest 10.98 below lsd, Apr. 5, 1938. Records available: 1937-38, 1945, 1951. Mar. 16, 1945, 10.84; Mar. 19, 1951, 10.82; Apr. 16, 10.91; May 18, 9.80.

23-56-6aa. Carl Gompert. Drilled irrigation water-table well in alluvium of Quaternary age, diameter 18 inches. Land-surface datum is 4,087.7 feet above msl. Highest water level 29.24 below lsd, Oct. 26, 1949; lowest 34.63 below lsd, July 1, 1949. Records available: 1948-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	30.98	Apr. 16	33.25	July 20	33.78	Oct. 4	29.79
Feb. 21	31.82	May 18	34.07	Aug. 17	32.61	15	31.47
Mar. 19	32.49	June 16	34.19	Sept. 18	31.12	Nov. 16	31.17

23-56-28ad. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in gravel of Pleistocene age, diameter 1 inch, depth 18 feet. Highest water level 8.69 below lsd, Nov. 8, 1940; lowest 9.90 below lsd, Apr. 16, 1951. Records available: 1936-42, 1944-45, 1951. Mar. 21, 9.83; Apr. 16, 9.90; May 18, 9.53; Oct. 4, 9.29.

23-57-5bb. Andrew Oleson. Drilled unused water-table well in siltstone of Oligocene age, diameter 4 inches, depth 142 feet. Land-surface datum is 4,111.5 feet above msl. Highest water level 20.67 below lsd, Oct. 4, 1951; lowest 25.73 below lsd, May 1, 1950. Records available: 1948-51.

Jan. 18	22.64	Apr. 16	23.68	July 20	23.83	Oct. 4	20.67
Feb. 21	22.93	May 18	24.02	Aug. 17	23.19	15	22.10
Mar. 19	23.36	June 16	24.11	Sept. 18	22.51	Nov. 16	22.26

Seward County

A11-2-23cc. August Rolfmeier. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 18 inches, depth 127 feet. Highest water level 77.05 below lsd, Dec. 28, 1951; lowest 77.86 below lsd, Oct. 14, 1948. Records available: 1948-51. Apr. 16, 77.22; May 21, 77.25; Oct. 8, 77.35; Dec. 28, 77.05.

Sheridan County

24-41-34da. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 13 feet. Highest water level 5.52 below lsd, June 8, 1935; lowest 9.37 below lsd, Oct. 21, 1941. Records available: 1934-42, 1944-51. Feb. 19, 8.29; Apr. 17, 8.24; Sept. 4, 7.21.

24-42-27ba. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 18 feet. Highest water level 12.19 below lsd, Apr. 4, 1946; lowest 13.45 below lsd, Apr. 17, 1951. Records available: 1946-51. Feb. 19, 13.30; Apr. 17, 13.45; Sept. 4, 13.02.

24-43-15da. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 21 feet. Highest water level 5.66 below lsd, June 8, 1949; lowest 8.08 below lsd, Nov. 4, 1940. Records available: 1940-42, 1944-51. Feb. 19, 6.74; Apr. 17, 6.76; Sept. 4, 6.58.

24-44-14da. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 11 feet. Highest water level 3.71 below lsd, Sept. 5, 1951; lowest 6.18 below lsd, Aug. 15, 1946. Records available: 1946-51. Feb. 19, 4.54; Apr. 17, 4.33; Sept. 5, 3.71.

24-44-18bb. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Highest water level 3.80 below lsd, May 11, 1949; lowest 5.50 below lsd, Aug. 15, 1946. Records available: 1946-51. Feb. 19, 5.20; Apr. 17, 5.19; Sept. 5, 4.41.

24-46-10cb. U. S. Geol. Survey. Driven observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Highest water level 2.26 below lsd, Apr. 4, 1946; lowest 7.35 below lsd, Aug. 15, 1946. Records available: 1946-51. Feb. 19, 6.29; Apr. 18, 6.18; Sept. 5, 6.39.

25-45-32ad. Herrian. Drilled unused water-table well in sand of Pleistocene age, diameter 4 inches, depth 106 feet. Highest water level 31.50 below lsd, July 15, 16, 1949; lowest 33.84 below lsd, Sept. 16, 1946. Records available: 1946-51.

Date	Water level						
Feb. 19	32.86	Feb. 22	32.85	Feb. 25	32.82	Apr. 18	32.88
20	32.85	23	32.84	26	32.82	Sept. 5	33.21
21	32.85	24	32.83				

29-46-4dc. George Glenn. Drilled unused water-table well in sandstone of Marsland formation, diameter 6 inches, depth 111 feet. Highest water level 58.23 below lsd, Oct. 3, 1951; lowest 61.34 below lsd, May 2, 1950. Apr. 20, 60.28; May 12, 60.28; July 30, 59.64; Oct. 3, 58.23. Records available: 1950-51.

29-46-24ad1. Kenneth Pyle. Drilled unused water-table well in sandstone of Marsland formation, diameter 6 inches, depth 95 feet. Highest water level 63.10 below lsd, Oct. 4, 1950; lowest 64.46 below lsd, July 19, 1950. Records available: 1950-51. Apr. 20, 64.23; May 12, 64.38; July 30, 64.23; Oct. 3, 63.59.

31-44-10dd. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand and gravel, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Highest water level 1.48 below lsd, Feb. 21, 1947; lowest 5.24 below lsd, Sept. 12, 1936. Records available: 1935-42, 1944-47, 1951. Apr. 21, 1.90; July 30, 2.54; Oct. 3, 1.87.

31-46-8ad. U. S. Geol. Survey. Formerly University of Nebraska. Driven observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 15 feet. Highest water level 2.78 below lsd, Apr. 21, 1951; lowest 6.20 below lsd, Nov. 1, 1940. Records available: 1936-42, 1944-47, 1951. Apr. 21, 2.78; July 30, 3.34; Oct. 3, 3.10.

33-42-36da. School District. Drilled stock water-table well in sandstone of Ogallala formation, diameter 4 inches, depth 51 feet. Highest water level 34.59 below lsd, Oct. 7, 1947; lowest 36.51 below lsd, Oct. 19, 1941. Records available: 1940-41, 1945, 1947, 1951. Apr. 21, 35.97; July 30, 35.89; Oct. 3, 35.90.

Sherman County

13-13-4dc. Thomas. Drilled stock water-table well in sand of Pleistocene age, diameter 4 inches, depth 190 feet. Land-surface datum is 2,083.92 feet above msl. Highest water level 120.64 below lsd, Dec. 6, 1949; lowest 122.11 below lsd, Feb. 7, 1950. Records available: 1949-51. Mar. 12, 120.80; May 4, 120.93; Sept. 14, 120.94; Dec. 3, 121.61.

14-14-8ac. Claude Zimmerman. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 155 feet. Land-surface datum is 2,032.77 feet above msl. Highest water level 5.79 below lsd, Aug. 16, 1950; lowest 8.76 below lsd, Oct. 1, 1948. Records available: 1948-51. Jan. 8, 7.42; Mar. 12, 7.43; May 4, 7.01; July 5, 6.53; Sept. 17, 7.62; Dec. 3, 7.91.

14-14-23cb. Lee Heil. Drilled irrigation water-table well in gravel of Pleistocene age, diameter 18 inches, depth 85 feet. Land-surface datum is 2,009.41 feet above msl. Highest water level 10.88 below lsd, June 26, 1949; lowest 12.65 below lsd, Nov. 8, 1949, Jan. 9, 1950. Records available: 1949-51. Sept. 19, 12.02.

14-16-23bb. Henry Franssen. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 123 feet. Land-surface datum is 2,159.36 feet above msl. Highest water level 39.15 below lsd, Sept. 19, 1951; lowest 39.79 below lsd, June 22, 1950. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 22, 1950	39.79	Sept. 27, 1950	39.48	Mar. 15, 1951	39.77	Sept. 19, 1951	39.15
Aug. 18	39.35	Nov. 6	39.56	Aug. 27	39.22	Dec. 3	39.29
Sept. 8	39.47	Jan. 12, 1951	39.67				

16-15-28bb. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter 3/4 inch, depth 35 feet. Land-surface datum is 2,126.38 feet above msl. Highest water level 18.57 below lsd, July 5, 1951; lowest 21.31 below lsd, Jan. 4, 1950. Records available: 1949-51. Jan. 10, 21.13; Mar. 12, 20.87; May 4, 21.03; July 5, 18.57; Sept. 18, 20.07; Dec. 3, 19.42.

Sioux County

24-57-35cb. R. J. Lenhart. Drilled irrigation water-table well in alluvium of Quaternary age, diameter 24 inches, depth 87 feet. Land-surface datum is 4,089.7 feet above msl. Highest water level 4.84 below lsd, Aug. 31, 1949; lowest 9.83 below lsd, Apr. 16, 1951. Records available: 1948-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	8.54	Apr. 16	9.83	July 20	8.41	Oct. 15	6.18
Feb. 21	9.06	May 18	9.10	Aug. 17	5.81	Nov. 16	7.13
Mar. 19	9.42	June 16	9.51	Sept. 18	5.49		

Stanton County

A22-2-8dd. Carroll. Drilled irrigation water-table well in sand of Pleistocene age, diameter 16 inches, depth 72 feet. Highest water level 32.18 below lsd, Nov. 7, 1951; lowest 38.15 below lsd, Apr. 6, 1950. Records available: 1950-51. Jan. 16, 37.11; Mar. 8, 37.82; May 28, 37.53; Aug. 30, 33.59; Nov. 7, 32.18.

A23-3-7bc. E. Spence. Drilled irrigation water-table well in sand of Pleistocene age, diameter 16 inches, depth 48 feet. Highest water level 9.62 below lsd, Nov. 7, 1951; lowest 14.39 below lsd, Jan. 16, 1951. Records available: 1950-51. Jan. 16, 14.39; Mar. 8, 14.17; May 28, 13.29; Aug. 30, 14.01; Nov. 7, 9.62.

A23-3-11bb. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in sand of Pleistocene age, diameter 1 inch, depth 13 feet. Highest water level 2.60 below lsd, May 28, 1951; lowest 6.51 below lsd, Oct. 27, 1936. Records available: 1936-40, 1942, 1946, 1948, 1950-51. Jan. 16, 4.36; Mar. 8, 3.14; May 28, 2.60; Aug. 29, 4.08; Nov. 7, 3.96.

Thomas County

24-30-20ab. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation water-table well in fine sand of Pleistocene age, diameter 1 inch, depth 13 feet. Highest water level 1.57 below lsd, Sept. 4, 1951; lowest 3.12 below lsd, Apr. 26, 1946. Records available: 1934-42, 1944-51. Feb. 19, 2.51; Apr. 17, 2.87; Sept. 4, 1.57.

Valley County

17-16-26dc. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter 12 inches, depth 11 feet. Land-surface datum is 2,152.4 feet above msl. Highest water level 2.70 below lsd, Apr. 1, 1949; lowest 6.83 below lsd, Dec. 26, 1946. Records available: 1943-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.30	4.74	3.41	4.18	3.14	3.10	....	5.21	4.45	4.87	....	4.41
2	4.27	4.74	3.39	4.24	....	3.43	....	5.28	4.47	4.90	4.59	4.44
3	4.24	4.65	3.37	4.30	....	3.57	....	5.35	4.47	4.92	4.60	....
4	4.25	4.45	3.57	4.30	....	3.76	3.03	5.40	....	4.72	4.64	....
5	4.30	4.23	3.47	3.60	....	3.92	3.04	5.46	4.27	4.54	4.65	4.51
6	4.35	3.99	3.46	3.57	....	4.05	3.10	5.51	3.70	4.53	4.63	4.51
7	4.42	3.96	3.65	3.68	....	4.16	....	5.54	3.70	4.47	4.50	4.49
8	4.43	3.84	3.77	3.89	4.61	4.18	....	5.59	3.80	4.50	4.47	4.56
9	4.43	3.79	3.97	4.08	4.57	4.02	....	5.18	4.00	4.59	4.45	4.67
10	4.34	3.75	4.02	4.00	4.64	4.14	3.26	5.07	4.19	4.65	4.43	4.74
11	4.28	3.69	4.09	4.02	4.71	4.30	2.98	4.85	4.31	4.71	4.48	4.73
12	4.21	3.58	4.21	4.15	4.77	4.50	3.94	4.72	3.38	4.74	4.48	4.73
13	4.17	3.58	4.29	4.27	4.77	4.54	3.10	4.59	3.59	4.74	4.48	4.61
14	4.15	3.59	....	4.32	4.16	4.27	3.44	4.56	3.72	4.68	4.36	4.58
15	4.14	3.51	4.35	4.39	3.73	4.43	3.67	4.64	3.89	4.65	4.42	4.62
16	4.10	3.52	4.25	4.46	....	4.61	3.90	5.77	4.07	4.71	4.50	4.65
17	3.99	3.48	4.25	4.50	....	4.69	3.94	4.90	4.23	4.78	4.56	4.66
18	3.93	3.47	4.28	4.53	....	4.45	4.00	4.99	2.80	4.82	4.61	4.67
19	3.88	3.44	4.30	4.58	....	4.39	4.03	5.05	4.40	4.82	4.61	4.68
20	3.93	3.44	4.30	4.04	....	4.79	4.32	5.05	4.50	4.81	4.63	4.72
21	3.93	3.48	4.27	3.77	3.15	4.83	4.50	4.97	4.54	4.76	4.57	4.78
22	3.94	3.43	4.05	3.82	3.45	4.42	4.42	5.06	4.58	4.75	4.56	4.80
23	3.97	3.46	3.94	4.02	3.75	4.40	5.62	5.11	4.61	4.60	4.56	4.80
24	3.98	3.43	3.94	4.15	3.98	4.21	4.78	5.11	4.62	4.58	4.62	4.80
25	3.98	3.43	3.96	4.01	5.05	4.28	4.89	4.44	4.63	4.64	4.66	4.75
26	3.87	3.44	3.98	4.05	4.13	4.19	4.97	4.34	4.61	4.66	4.60	4.75
27	4.10	3.54	3.93	3.06	4.35	4.60	5.05	4.26	4.70	4.53	4.58	4.74
28	4.44	3.33	3.82	3.12	4.50	4.27	5.06	4.23	4.77	4.30	4.49	....
29	4.62	3.86	3.34	4.58	3.50	5.00	4.30	4.80	4.33	4.44	4.43	....
30	4.69	4.00	3.10	4.58	....	5.09	4.44	4.84	4.41	4.48	....	....
31	4.72	4.11	....	3.25	....	5.14	4.51	....	....	....	....	....

18-13-23dd. W. T. Hutchins. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 83 feet. Highest water level 8.70 below lsd, Aug. 3, 1949; lowest 23.37 below lsd, Oct. 12, 1937. Records available: 1934-42, 1948-51. Jan. 5, 12.75; Sept. 19, 12.05.

18-16-30cc. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter 3/4 inch, depth 14 feet. Land-surface datum is 2,217.61 feet above msl. Highest water level 3.75 below lsd, Sept. 17, 1951; lowest 5.27 below lsd, Feb. 3, Mar. 3, 1950. Records available: 1949-51. Jan. 10, 4.71; Sept. 17, 3.75.

19-13-28bb. Wm. Peterson. Drilled irrigation water-table well in sand and sandstone of Tertiary age, diameter 18 inches, depth 98 feet. Highest water level 12.29 below lsd, Apr. 29, 1949; lowest 14.58 below lsd, Sept. 30, 1948. Records available: 1948-51. Jan. 5, 14.06; Sept. 18, 13.26.

19-14-6dc. Chas Verzel. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diameter 24 inches, depth 97 feet. Highest water level 27.21 below lsd, Sept. 20, 1949; lowest 37.90 below lsd, Aug. 10, 1934. Records available: 1934-42, 1948-51. Aug. 24, 1950, 29.37; Oct. 25, 28.77; Nov. 27, 28.93; Dec. 29, 29.29; Feb. 2, 1951, 29.51; Feb. 27, 29.78; Apr. 26, 29.44.

Wayne County

A27-1-36cc. L. E. Jenkins. Drilled stock water-table well in alluvial sand, diameter 6 inches, depth 32 feet. Highest water level 7.10 below lsd, Aug. 12, 1950; lowest 9.72 below lsd, Mar. 19, 1951. Records available: 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 1, 1949	7.50	Apr. 29, 1950	8.15	Oct. 8, 1950	9.00	Dec. 24, 1950	9.70
Dec. 26	9.15	July 3	9.10	Nov. 11	9.60	Mar. 19, 1951	9.72
Feb. 21, 1950	9.20	Aug. 12	7.10	25	9.60	24	9.58

Webster County

1-9-9cc. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diameter  $1\frac{1}{4}$  inches, depth 13 feet. Highest water level 3.17 below lsd, June 20, 1949; lowest 8.54 below lsd, Feb. 4, 1949. Records available: 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 24	4.61	July 25	6.17	Sept. 6	5.74	Oct. 9	7.40
May 25	3.85	Aug. 24	7.30	26	7.23	24	7.51
June 19	4.47						

1-11-11ab. U. S. Geol. Survey. Drilled observation water-table well in silt and fine sand, diameter 8 inches, depth 17 feet. Land-surface datum is 1,684.9 feet above msl. Highest water level 1.34 below lsd, July 11, 12, 1951; lowest 9.49 below lsd, Feb. 11, 1949. Records available: 1946-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.17	7.37	7.50	7.11	6.80	....	2.90	3.04	4.50	4.57	4.84	5.23
2	7.17	7.37	7.36	7.10	6.75	....	3.01	3.20	4.48	4.62	4.85	5.22
3	7.18	7.38	7.22	7.08	6.73	....	3.08	3.22	4.40	4.62	....	5.22
4	7.19	7.38	7.14	7.08	6.72	....	3.21	3.11	4.15	4.55	....	....
5	7.20	7.38	7.07	7.08	6.72	....	3.31	3.20	4.62	4.50	4.93	....
6	7.21	7.38	7.03	7.08	6.77	....	3.38	3.35	2.80	4.40	4.95	....
7	7.22	7.38	7.03	7.07	6.80	....	3.47	3.48	2.94	4.35	4.97	....
8	7.23	7.38	7.04	7.07	6.81	....	3.57	3.61	3.02	4.30	4.99	....
9	7.23	7.38	7.05	7.06	6.83	....	3.67	3.73	3.10	4.30	5.01	....
10	7.24	7.48	7.05	7.06	6.85	....	3.70	3.85	3.22	4.30	5.03	....
11	7.25	7.50	7.07	7.06	6.88	....	1.34	3.96	3.37	4.33	5.05	....
12	7.26	7.50	7.08	7.06	6.89	....	1.34	4.05	3.39	4.37	5.05	....
13	7.27	7.51	7.09	7.08	6.91	....	1.75	4.16	3.42	4.42	5.07	....
14	7.27	7.52	7.10	7.08	6.93	....	1.81	4.17	3.53	4.47	5.09	....
15	7.28	7.53	7.11	7.09	6.95	....	1.88	4.17	3.54	4.52	5.12	....
16	7.29	7.54	7.12	7.09	6.97	....	2.00	4.23	3.51	4.52	5.14	....
17	7.29	7.54	7.13	7.10	6.97	....	2.13	4.29	3.58	4.63	5.17	....
18	7.30	7.54	7.14	7.11	6.98	....	2.14	4.38	3.68	4.68	5.18	....
19	7.30	7.55	7.15	7.12	6.98	....	2.18	4.40	3.75	4.72	5.23	....
20	7.31	7.55	7.15	7.13	6.97	....	2.34	4.40	3.86	4.73	5.23	....
21	7.32	7.56	7.16	7.14	6.96	....	2.52	4.43	3.97	4.77	5.25	....
22	7.32	7.57	7.16	7.14	6.93	....	2.52	4.47	4.05	4.80	5.27	....
23	7.32	7.57	7.18	7.12	6.85	....	1.80	4.51	4.13	4.83	5.29	....
24	7.33	7.57	7.18	7.06	6.80	....	....	4.50	4.20	4.85	5.31	....
25	7.33	7.57	7.18	7.02	6.77	2.17	....	4.51	4.23	4.87	5.32	....
26	7.34	7.57	7.18	6.96	6.78	2.28	2.55	4.59	4.28	4.90	5.32	....
27	7.34	7.56	7.18	6.91	6.80	2.30	2.65	4.48	4.37	4.90	5.30	....
28	7.35	7.55	7.18	6.85	6.82	2.51	2.53	4.28	4.44	4.88	5.37	....
29	7.35	7.55	7.18	6.82	....	2.13	2.47	4.28	4.48	4.85	5.35	5.87
30	7.36	7.17	6.80	....	2.27	....	2.66	4.37	4.53	4.81	5.33	....
31	7.36	7.15	....	....	....	2.86	4.47	....	4.82	....	....	....

1-12-2bb. U. S. Geol. Survey. Drilled observation water-table well in black soil, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Land-surface datum is 1,723.57 feet above msl. Highest water level 0.94 below lsd, June 21, 1949; lowest 7.12 below lsd, Oct. 8, 1948. Records available: 1946-51. May 26, 3.62; July 2, 2.02; July 26, 1.57; Aug. 28, 2.42; Oct. 3, 2.67.

2-10-36db. Henry J. Somerhalder. Dug irrigation water-table well in sand and gravel of Pleistocene age, diameter 40 inches, depth 35 feet, cribbed with wood. Highest water level 25.65 below lsd, June 22, 1935; lowest 28.07 below lsd, Feb. 12, 1946. Records available: 1934-40, 1942, 1946-51. May 25, 26.56; July 2, 26.21; July 26, 26.03; Aug. 27, 26.22; Oct. 3, 26.08.

York County

11-1-35bb. Wilbur Schlechte. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 283 feet. Highest water level 104.61 below lsd, Dec. 28, 1951; lowest 105.40 below lsd, Oct. 14, 1948. Records available: 1948-51. Apr. 16, 105.05; May 21, 104.89; Oct. 8, 104.75; Dec. 28, 104.61.

11-3-36ab. Mother Jewel Home. Drilled irrigation water-table well in sand of Pleistocene age, diameter 12 inches. Highest water level 66.25 below lsd, Oct. 9, 1951; lowest 68.00 below lsd, June 23, 1948. Records available: 1948-51. Apr. 16, 66.57; May 21, 66.47; Oct. 9, 66.25; Dec. 28, 66.38.

11-4-25bc. Bryce Tracy. Drilled irrigation water-table well in sand of Pleistocene age, diameter 18 inches, depth 114 feet. Land-surface datum is 1,709.05 feet above msl. Highest water level 63.08 below lsd, Dec. 28, 1951; lowest 66.43 below lsd, Oct. 17, 1949. Records available: 1948-51. Apr. 16, 64.93; May 21, 64.64; Oct. 9, 64.95; Dec. 28, 63.08.

11-4-31ba. Herman Fenster. Drilled irrigation water-table well in sand of Pleistocene age, diameter 22 inches, depth 140 feet. Land-surface datum is 1,740.05 feet above msl. Highest water level 70.91 below lsd, May 21, 1951; lowest 72.65 below lsd, Oct. 14, 1948. Records available: 1948-51. Apr. 16, 70.94; May 21, 70.91; Oct. 9, 71.32; Dec. 28, 71.08.

## NORTH DAKOTA

By P. D. Akin and G. A. LaRocque, Jr.

### Scope of Water-Level Program

The observation-well program in North Dakota was continued in 1951 in cooperation with the State Water Conservation Commission and the State Geological Survey. The work in connection with the Missouri Basin program was largely discontinued during 1951. Measurements were made in 187 wells, 4 of which are equipped with recording gages. Location of observation wells is shown on figure 14-17. Field work was carried on in connection with the investigation of ground-water conditions in the vicinities of the towns of Devils Lake, Mylo, Rolla, St. John, and Fairmount. A report on the ground-water conditions in the vicinity of the town of Neche was published in mimeographed form; reports on ground-water conditions in the vicinities of the towns of Mohall, Litchville, Streeter, Minnewaukan, and Fairmount were completed.

### Precipitation

The precipitation in the State as a whole in 1951 was 16.58 inches, or 0.54 inch below normal. The eastern and western parts received less than average precipitation, but a large block in the central and southern part received more than average. Precipitation for the State was below average in March, April, May, June, July, and November.

### Interpretation of Water-Level Fluctuations

The average change in ground-water levels during 1951 followed the pattern of previous years. The water levels declined during January, February, and March. The lowest water levels of the year were recorded in March. In April the water levels rose in response to recharge from melting snow and in conjunction with the thawing of the ground surface. The highest water levels occurred in May, after which they declined until the end of the year. At the end of 1951, the average ground-water level was 0.07 foot higher than at the end of 1950.

The average monthly water levels from 1937 through 1951 in selected observation wells are given in the following table. Figure 18 is a graphical presentation of the data in the table.

Monthly average water levels, in feet above assumed datum planes,  
in observation wells in North Dakota, 1937-51

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1937	.....	.....	.....	.....	.....	.....	.....	.....	100.31	100.19	100.13	100.05
1938	99.97	99.93	100.12	100.41	100.68	100.35	99.99	99.61	99.59	99.44	99.51	99.54
1939	99.49	99.38	99.38	99.95	99.98	100.07	99.89	99.62	99.41	99.37	99.34	99.31
1940	99.24	99.14	99.13	99.16	99.43	99.52	99.34	99.24	99.07	98.96	98.95	98.92
1941	98.84	98.74	98.83	99.76	99.97	100.43	100.39	99.89	100.16	100.73	100.64	100.28
1942	100.68	100.41	100.43	101.40	101.45	101.67	101.42	101.48	101.48	101.35	100.98	100.73
1943	100.51	100.44	100.40	101.30	102.09	102.73	102.68	102.19	101.91	101.50	101.37	101.26
1944	100.40	100.24	100.02	100.22	100.52	101.15	101.28	101.37	101.67	101.36	101.55	101.59
1945	101.04	100.96	101.06	101.49	101.74	101.71	101.27	100.95	100.71	100.71	100.70	100.54
1946	100.01	100.24	100.18	101.18	101.55	100.97	100.60	100.36	100.07	100.70	100.84	100.67
1947	100.48	100.49	100.33	101.35	101.74	102.25	102.37	101.93	101.49	101.48	101.57	101.51
1948	101.30	101.01	101.10	102.29	104.63	103.74	103.27	102.65	101.73	101.52	101.47	101.32
1949	101.12	100.84	100.96	103.00	103.88	103.36	102.89	102.45	101.97	101.65	101.96	101.84
1950	101.56	101.23	101.16	101.84	103.86	104.02	103.42	102.88	102.55	102.57	102.30	102.06
1951	101.70	101.49	101.46	103.24	103.85	103.72	103.27	102.75	102.84	102.53	102.32	102.13

### Well-Numbering System

The well-numbering system used in this report conforms to a system now adopted for use in all the Missouri Basin States. The well numbers are derived by reference to the township, range, and section system of land subdivision in use over the greater part of the United States. The number serves to designate the well specifically and, also, indicates its location in the field. In North Dakota, the land descriptions are referred to the base line that extends laterally across

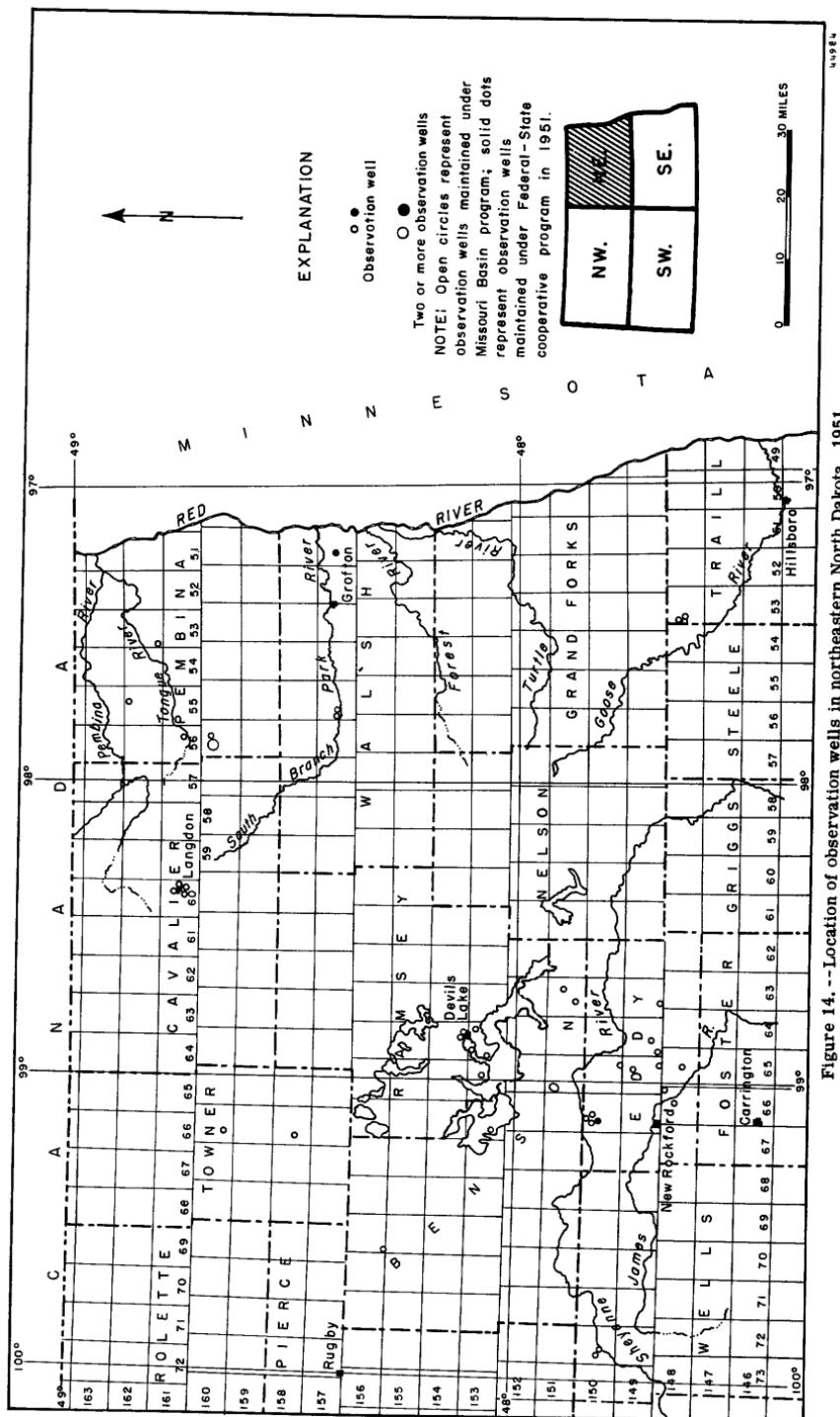


Figure 14. --Location of observation wells in northeastern North Dakota, 1951.

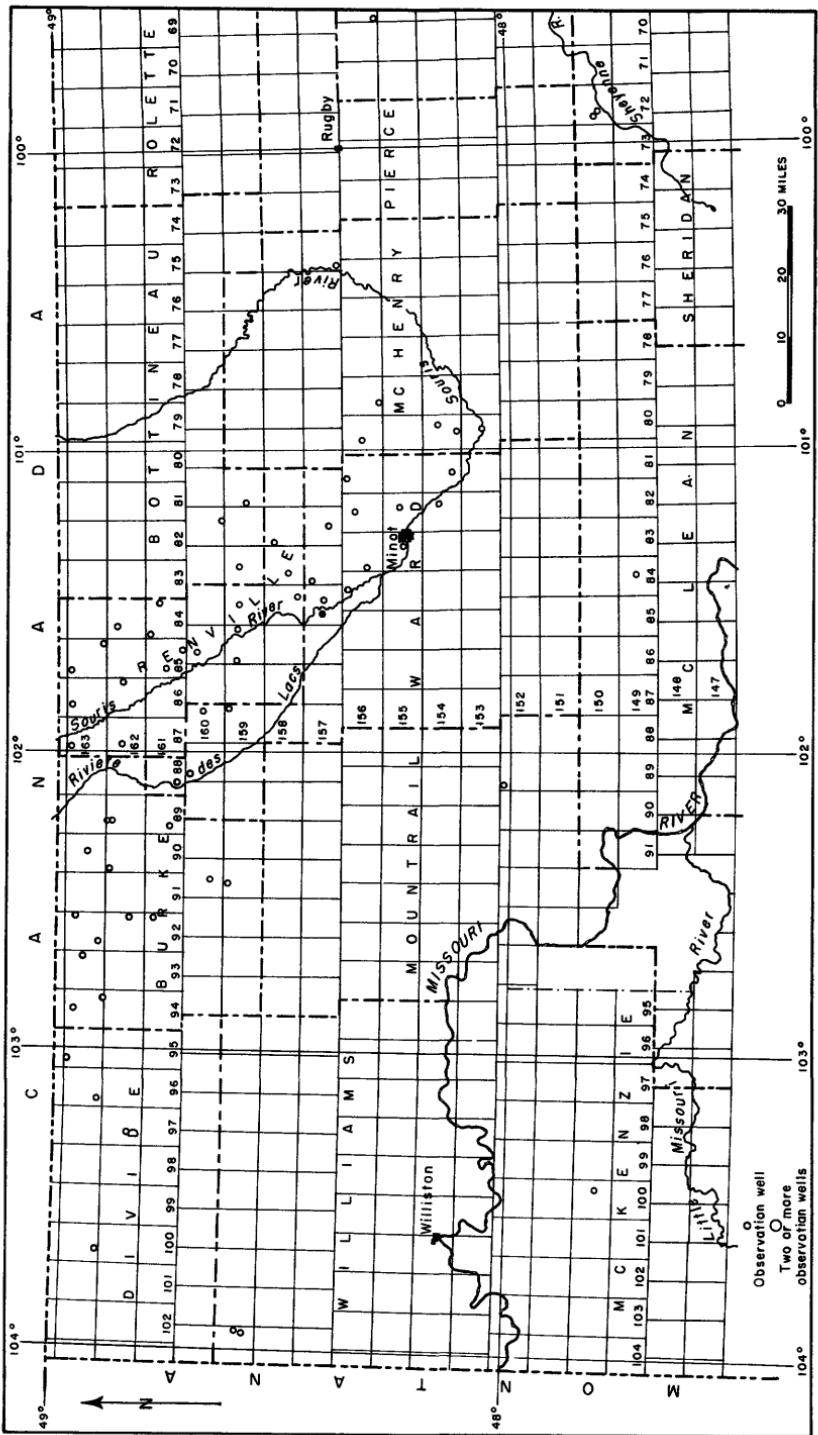


Figure 15.-Location of observation wells in northwestern North Dakota, 1951.

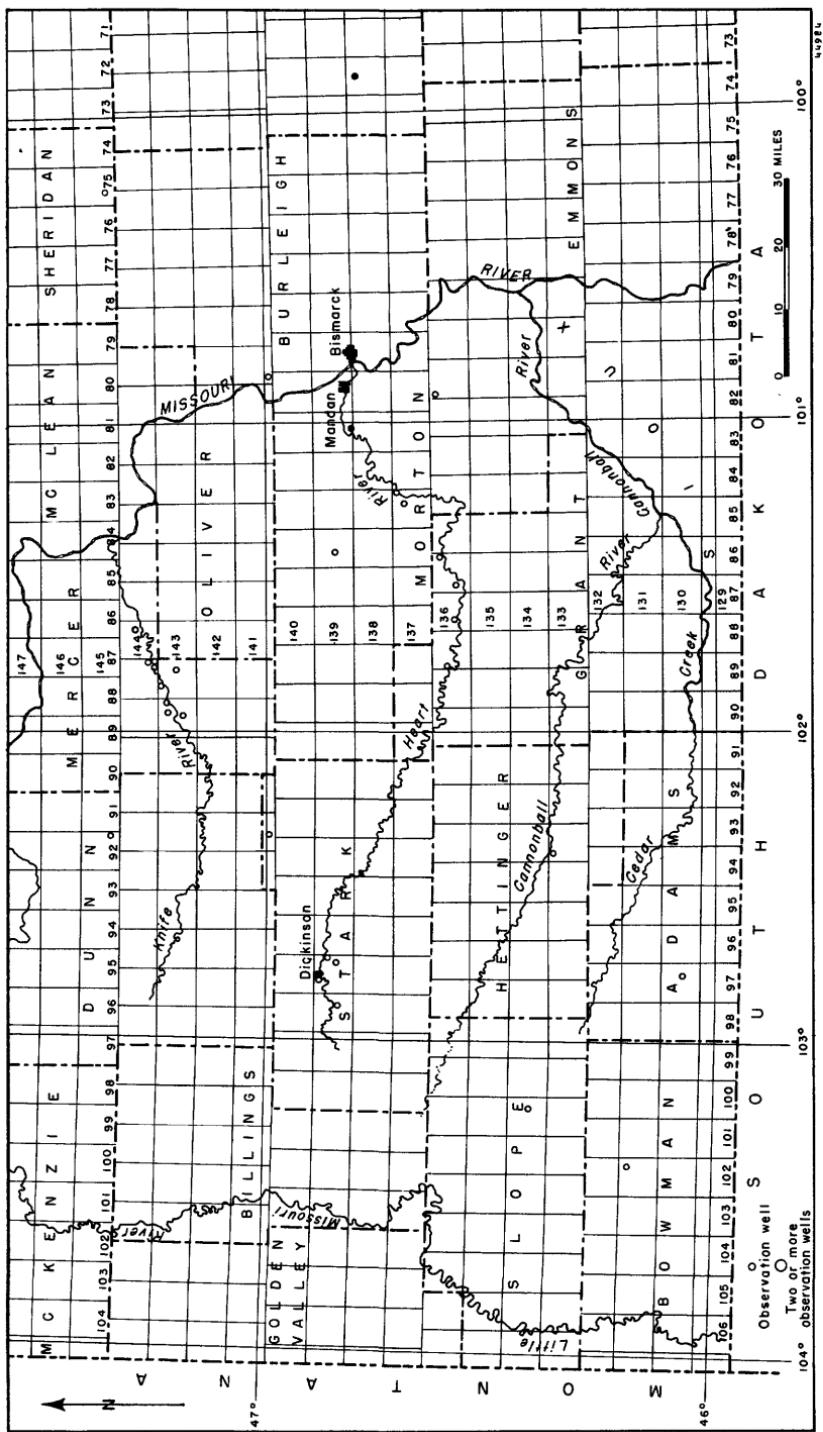


Figure 16. -- Location of observation wells in southwestern North Dakota, 1951.

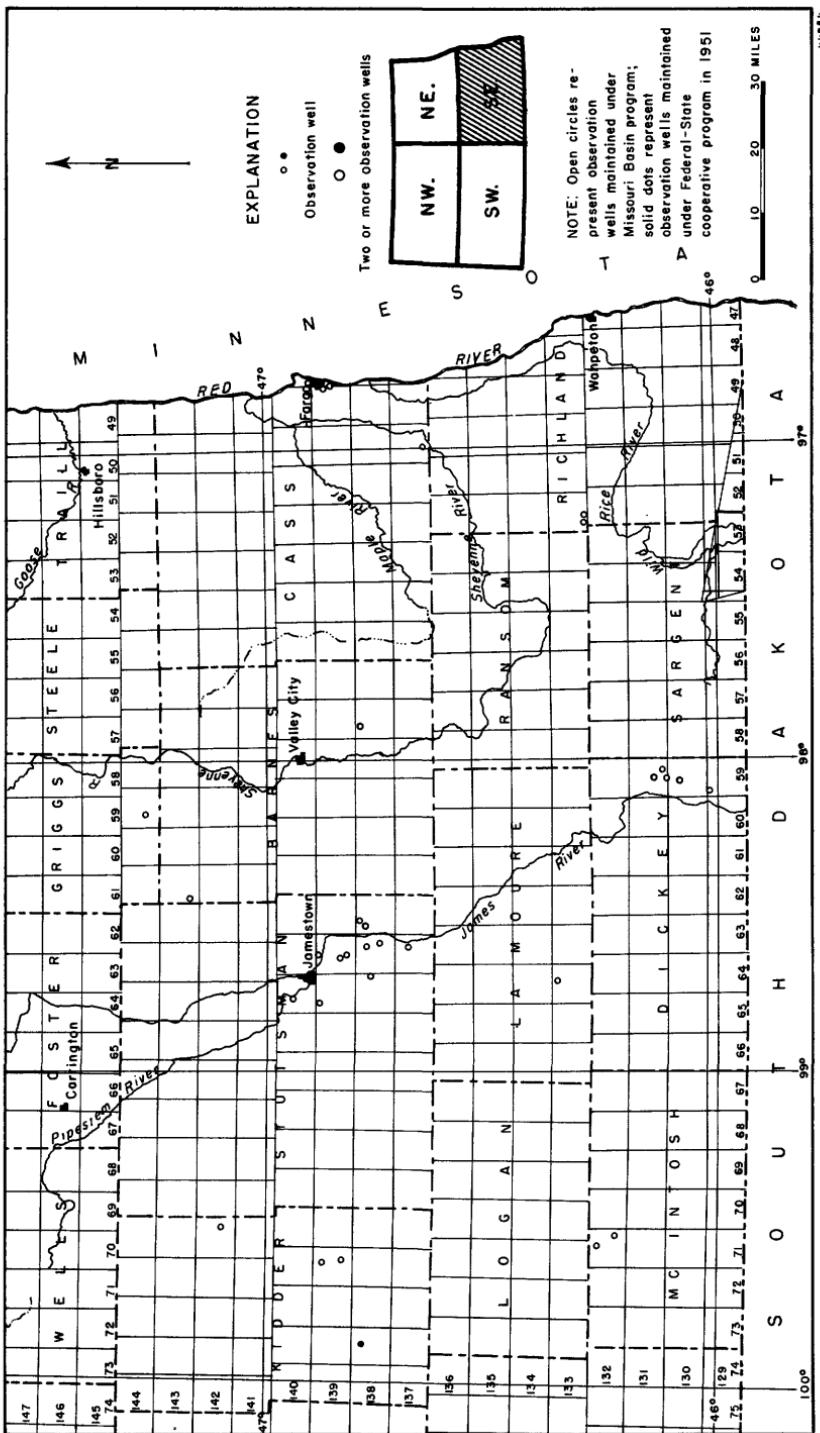


Figure 17.--Location of observation wells in southeastern North Dakota, 1951.

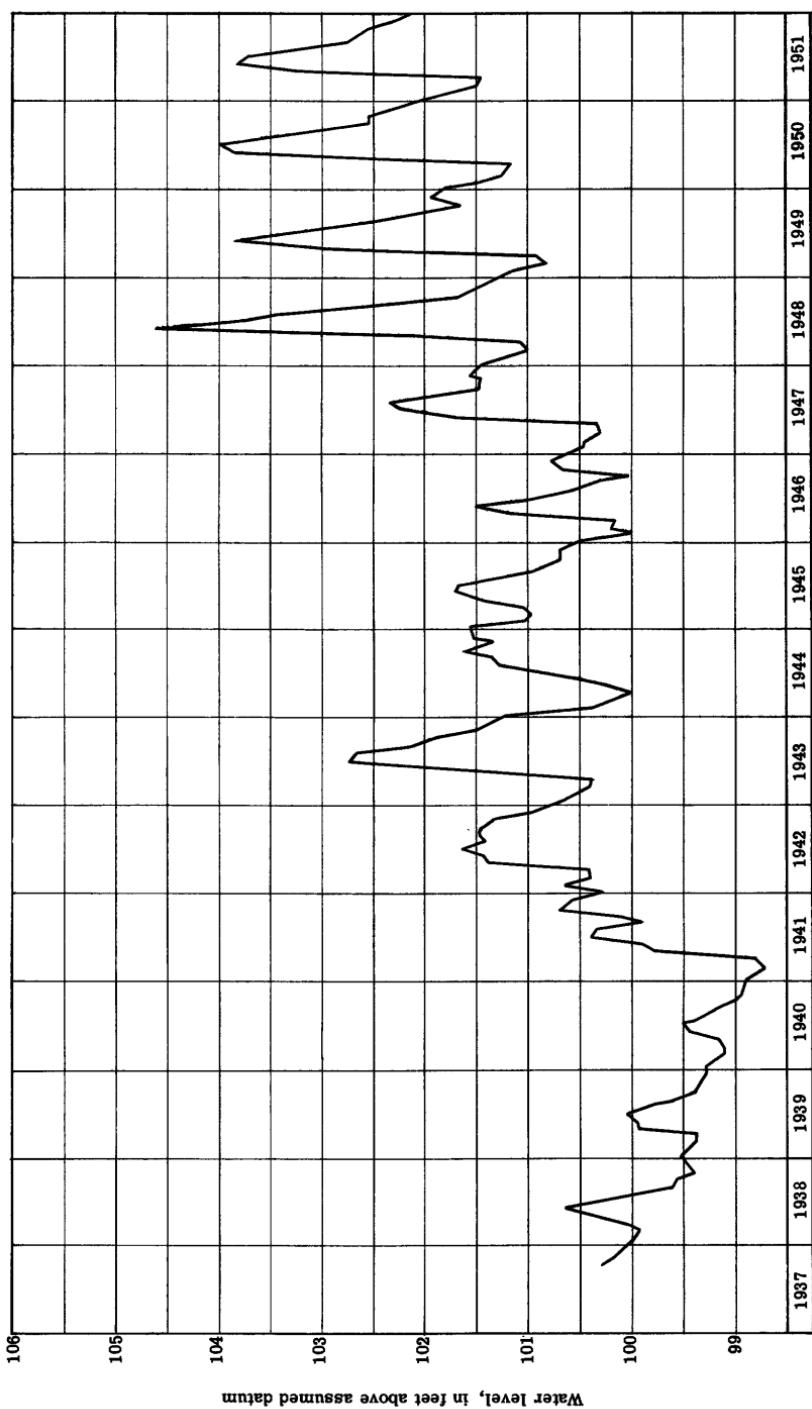


Figure 18. --Average monthly water levels in selected wells in North Dakota, 1937-51.

the middle of Arkansas and to the fifth principal meridian. All townships are north of the base line and all ranges are west of the principal meridian. The well number consists of three segments divided by hyphens. The first segment is the township number north of the base line and the second is the range number west of the principal meridian. The third segment consists of a number followed by lowercase letters that are again followed by a number. The first number indicates the section within the designated township. The section is divided into quarters (160-acre tracts) designated by the first lowercase letter. The letters a, b, c, and d are assigned in a counterclockwise order beginning in the northeast quarter. The quarter section is again divided into four parts (40-acre tracts) designated by the second lowercase letter. In some cases, the 40-acre tracts have been sub-divided into 10-acre tracts designated by a third lowercase letter. The number following the lowercase letters simply refers to the numerical order in which the wells were scheduled in the 40-acre or 10-acre tract of land indicated by the preceding part of the well number. As an example, the first well scheduled in the NW<sub>1</sub>SW<sub>1</sub> sec. 5, T. 138 N., R. 57 W. is designated 138-57-5cb1. If a second well were scheduled in the same 40-acre tract, it would be designated 138-57-5cb2.

#### Well Descriptions and Water-Level Measurements

(Water levels are in feet below land-surface datum unless otherwise indicated.)

##### Adams County

130-97-14cc1. Mrs. Halverson. Drilled water-table well in Fort Union formation, diameter 4 inches, depth 77 feet. Highest water level 44.34 below lsd, Dec. 4, 1951; lowest 53.59 below lsd, Apr. 16, 1941. Records available: 1940-49, 1951.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	47.80	May 1	48.10	June 16	48.38	Nov. 24	48.55
Feb. 8	49.20	22	48.50	July 12	48.51	Dec. 4	44.34

##### Barnes County

138-57-5cb1. H. H. Wilkins. Dug water-table well in glacial drift, diameter 24 inches, depth 51 feet. Highest water level 27.34 below lsd, Nov. 10, 1951; lowest 43.41 below lsd, Aug. 30, 1941. Records available: 1939-47, 1949-51. June 28, 27.61; Nov. 10, 27.34.

143-61-30ccc1. U. S. Geol. Survey test hole in public road right-of-way. Drilled unused water-table well in glacial sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 66 feet, sandpoint in bottom. Water level affected by pumping of nearby municipal well. Highest water level 15.29 below lsd, May 24, 1950. Records available: 1950. No measurement made in 1951.

##### Benson County

151-63-14aaa. R. L. Schlieve. U. S. Geol. Survey test hole. Drilled unused water-table well in glacial outwash sand and gravel, diameter 1 $\frac{1}{2}$  inches, depth 40 feet, sandpoint in bottom. Highest water level 17.58 below lsd, Oct. 11, 1950; lowest 19.83 below lsd, Nov. 25, 1951. Records available: 1950-51.

Feb. 21	19.73	Mar. 30	19.64	June 9	19.20	Sept. 1	19.41
28	19.62	Apr. 4	19.61	15	19.10	9	19.41
Mar. 2	19.61	7	19.36	23	19.18	15	19.58
3	19.61	11	19.00	July 1	19.26	23	19.59
4	19.60	14	18.30	8	19.26	Oct. 14	19.51
5	19.60	20	18.00	14	19.26	21	19.61
6	19.59	27	18.80	21	19.30	Nov. 1	19.66
7	19.59	May 5	18.88	24	19.35	10	19.66
8	19.59	12	18.89	Aug. 5	19.33	18	19.83
9	19.59	19	18.90	11	19.45	25	19.83
10	19.59	25	18.91	18	19.45	Dec. 4	19.76
27	19.64	June 2	19.06	25	19.45	10	19.73

151-63-29aac. U. S. Geol. Survey. Drilled unused water-table well in glacial outwash sand and gravel, diameter 6 inches, depth 67 feet. Highest water level 15.86 below lsd, Aug. 18, 1951; lowest 16.21 below lsd, Dec. 14, 1951. Records available: 1951.

##### Daily lowest water level from recorder graph

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Day	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	15.90	15.92	16.06	16.15	6	.....	15.91	16.00	16.07	16.13
2	.....	15.90	15.92	16.06	16.12	7	.....	15.91	16.00	16.07	16.18
3	.....	15.90	15.95	16.06	16.10	8	.....	15.89	15.98	16.03	16.20
4	.....	15.90	15.98	16.06	16.13	9	.....	15.87	15.98	16.05	16.17
5	.....	15.88	16.00	16.07	16.13	10	.....	15.86	16.00	16.07	16.17

## 151-63-29aac--Continued.

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Day	Aug.	Sept.	Oct.	Nov.	Dec.
11	.....	15.88	16.01	16.07	16.17	22	15.87	15.93	16.03	16.13	16.18
12	.....	15.89	15.98	16.01	16.17	23	15.86	15.94	16.04	16.13	16.19
13	.....	15.91	16.00	16.04	16.19	24	15.86	15.95	16.01	16.13	16.18
14	.....	15.92	16.00	16.07	16.21	25	15.86	15.94	16.05	16.13	16.20
15	.....	15.93	16.00	16.10	16.20	26	15.86	15.90	16.05	16.14	.....
16	.....	15.92	16.03	16.13	16.18	27	15.86	15.96	16.04	16.10	.....
17	15.87	15.93	16.04	16.14	16.17	28	15.90	15.97	16.03	16.12	.....
18	15.86	15.92	16.03	16.10	16.17	29	15.89	15.93	16.04	16.14	.....
19	15.86	15.90	16.00	16.10	16.17	30	15.88	15.93	16.07	16.15	.....
20	15.86	15.92	15.97	16.08	16.16	31	15.90	.....	16.06	.....	.....
21	15.87	15.93	16.00	16.12	16.15						

153-66-21aab. U. S. Geol. Survey. Drilled unused water-table well in glacial sand and gravel, diameter 6 inches, depth 103 feet, casing slotted 83-103. Highest water level 1.25 below lsd, Oct. 7, 1950; lowest 1.82 below lsd, Nov. 14, 1950. Records available: 1950-51. May 29, 1, 70.

156-69-36cal. H. Biltingsrud. Drilled water-table well in glacial drift, diameter 36 inches, depth 29 feet. Highest water level 6.27 below lsd, May 24, 1950; lowest 21.60 below lsd, Nov. 3, 1951. Records available: 1940-51. June 12, 11.89; Nov. 3, 21.60.

Bottineau County

159-81-19dc. Alfred Nelson. Dug domestic well, diameter 4 feet, depth 13 feet. Highest water level 6.36 below lsd, May 15, 1951; lowest 10.69 below lsd, Nov. 15, 1946. Records available: 1945-51. May 15, 6.36; Aug. 22, 9.24. Measurement discontinued.

159-83-9aa. Martinison Estate. Dug domestic stock well, diameter 4 feet, depth 61 feet. Highest water level 0.68 below lsd, May 12, 1950; lowest 6.69 below lsd, Nov. 20, 1946. Records available: 1945-51. May 15, 1.06; Aug. 22, 4.93. Measurement discontinued.

160-82-34dd. Owner unknown. Dug stock well, diameter 18 inches. Highest water level 3.79 below lsd, May 12, 1950; lowest 9.36 below lsd, Oct. 31, 1947. Records available: 1945-51. May 15, 5.45; Aug. 22, 6.80. Measurement discontinued.

Bowman County

131-102-11cal. City of Bowman. Drilled unused water-table well in Fort Union formation, diameter 8 inches, depth 69 feet. Highest water level 18.06 below lsd, July 11, 1951; lowest 24.82 below lsd, Oct. 9, 1950. Records available: 1938-42, 1944-51.

Date	Water level						
Jan. 2	18.67	May 21	18.25	July 11	18.06	Nov. 24	18.27
Feb. 9	18.48	June 15	18.33	Aug. 13	18.38	Dec. 3	20.11
Apr. 30	18.12						

Burke County

159-91-4dd1. U. S. Fish and Wildlife Service. Jetted unused artesian well, diameter 2 inches, depth 200 feet. Highest water level 75.96 below lsd, May 25, 1950; lowest 77.89 below lsd, Nov. 23, 1940. Records available: 1940-46, 1949-50. No measurement made in 1951.

160-91-21cd1. U. S. Fish and Wildlife Service. Jetted unused artesian well, diameter 2 inches, depth 90 feet. Highest water level 56.35 below lsd, July 12, 1944; lowest 59.05 below lsd, Sept. 10, 1949. Records available: 1940-47, 1949-50. No measurement made in 1951.

161-89-20aa. T. Jacobson. Drilled unused well, diameter 5 inches, depth 96 feet. Highest water level 24.16 below lsd, May 2, 1950; lowest 25.58 below lsd, Sept. 14, 1945. Records available: 1945-51. May 9, 24.16; Aug. 15, 25.00. Measurement discontinued.

161-92-12dd1. Maud Beard. Drilled domestic well, diameter 18 inches, depth 54 feet. Highest water level 8.70 below lsd, May 11, 1948; lowest 30.82 below lsd, May 4, 1950. Records available: 1945-51. May 9, 26.23; Aug. 14, 14.83. Measurement discontinued.

162-89-5dd1. Mrs. P. M. Peterson. Drilled unused well, diameter 3 inches, depth 394 feet. Highest water level 68.84 below lsd, July 12, 1950; lowest 70.60 below lsd, Sept. 30, 1946. Records available: 1937-51. May 9, 69.82; June 22, 70.20; Aug. 15, 69.59; Nov. 24, 70.18.

162-90-6ba2. Owner unknown. Dug domestic well, diameter 18 inches, depth 35 feet. Highest water level 4.10 below lsd, May 11, 1949; lowest 8.21 below lsd, Sept. 20, 1949. Records available: 1948-51. May 9, 6.77; Aug. 15, 7.21. Measurement discontinued.

162-92-24cc. M. E. Glaspey. Dug domestic well, diameter 4 feet, depth 14 feet. Highest water level 2.26 below lsd, May 11, 1948; lowest 9.62 below lsd, Oct. 18, 1946. Records available: 1945-51. May 9, 2.91; Aug. 14, 6.72. Measurement discontinued.

162-94-2ba1. Anton Boen. Dug domestic well, diameter 24 inches, depth 20 feet. Highest water level 6.30 below lsd, May 8, 1951; lowest 17.22 below lsd, Aug. 8, 1946. Records available: 1945-51. May 8, 6.30; Aug. 14, 7.96. Measurement discontinued.

163-90-22cc1. Owner unknown. Drilled domestic and stock well. Highest water level 27.24 below lsd, July 12, 1950; lowest 32.95 below lsd, Sept. 21, 1945. Records available: 1945-51. May 9, 27.69; Aug. 15, 28.01. Measurement discontinued.

163-92-12cc1. E. Engstrom. Dug domestic well, diameter 24 inches, depth 16 feet. Highest water level 1.79 below lsd, May 9, 1951; lowest 11.76 below lsd, Oct. 17, 1946. Records available: 1945-51. May 9, 1.79; Aug. 14, 6.01. Measurement discontinued.

163-92-32dd. Owner unknown. Dug stock well, diameter 36 inches. Highest water level 6.44 below lsd, May 8, 1951; lowest 12.00 below lsd, Sept. 12, 1945. Records available: 1945-51. May 8, 6.44; Aug. 14, 7.91. Measurement discontinued.

163-93-13bd. A. Curtis. Drilled stock well, diameter 18 inches, depth 30 feet. Highest water level 9.59 below lsd, July 13, 1950; lowest 14.41 below lsd, Oct. 17, 1946. Records available: 1945-51. May 8, 11.29; Aug. 14, 11.20. Measurement discontinued.

163-94-10cd1. A. B. Peterson. Drilled domestic stock well, diameter 18 inches, depth 46 feet. Highest water level 17.63 below lsd, May 8, 1951; lowest 28.91 below lsd, Aug. 8, 1946. Records available: 1945-51. May 8, 17.63; Aug. 14, 17.71. Measurement discontinued.

#### Burleigh County

141-80-35cc1. Celia DeLong. Dug well, size 36 by 36 inches, depth 19 feet. Highest water level 13.22 below lsd, Nov. 25, 1950; lowest 15.85 below lsd, Sept. 13, 1948. Records available: 1940-46, 1948-51. June 25, 14.04; Nov. 10, 13.85.

#### Cass County

137-50-29dda5. City of Kindred. Drilled water-table well in glacial Lake Agassiz deposits, diameter 16 inches, depth 35 feet. Highest water level 6.64 below lsd, July 9, 1951; lowest 9.70 below lsd, Oct. 29, 1948. Records available: 1948-51. July 9, 6.64.

139-48-6ccd1. The Pierce Co. 1019 First Ave. North, Fargo. Drilled unused artesian well in glacial drift, diameter 6 inches, depth 403 feet. Granite reached at 280 feet. Highest water level 28.01 below lsd, July 3, 1940; lowest 42.39 below lsd, Oct. 3, 1941. Records available: 1940-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	36.18	35.95	35.71	35.55	.....	36.25	.....	37.53	38.01	37.10	36.51
2	.....	36.10	35.91	35.73	35.57	.....	36.25	.....	37.56	37.99	37.09	36.50
3	.....	36.10	.....	35.73	35.59	.....	36.25	.....	37.59	37.94	37.04	36.46
4	.....	36.08	.....	35.73	35.61	.....	36.25	36.54	37.61	37.92	36.99	36.41
5	.....	36.09	.....	35.73	35.62	36.17	36.25	36.56	37.61	37.90	36.99	36.40
6	36.40	36.07	35.85	35.73	.....	36.20	36.21	36.63	37.63	37.90	36.98	36.38
7	36.40	36.09	35.86	35.71	.....	36.20	36.19	36.67	37.78	37.90	36.97	36.36
8	36.38	36.10	35.87	35.70	.....	36.21	36.18	36.72	37.84	37.88	36.94	36.36
9	36.33	36.10	35.88	35.69	.....	36.24	36.17	36.79	37.86	37.84	36.88	36.37
10	36.29	36.09	35.88	35.66	.....	36.24	36.17	36.83	37.89	37.84	36.87	36.37
11	36.29	36.05	35.87	35.66	35.69	36.24	36.20	36.91	37.90	37.78	36.87	36.34
12	36.28	36.06	35.88	35.66	35.69	36.24	36.20	36.96	37.91	37.73	36.82	36.32
13	36.28	36.08	35.88	35.65	35.69	36.24	36.20	37.01	37.93	37.68	36.76	36.32
14	36.27	36.09	35.84	35.63	35.70	36.25	36.20	37.05	37.97	37.63	36.73	36.32
15	36.24	36.09	35.81	35.60	35.77	36.25	36.19	37.08	.....	37.59	36.70	.....
16	36.24	36.07	35.78	35.61	35.72	36.25	36.18	37.13	.....	37.54	36.75	.....
17	36.19	36.03	35.75	35.61	35.74	36.26	36.18	37.15	.....	37.55	36.77	.....
18	36.16	36.01	35.75	35.61	.....	36.27	36.18	37.19	.....	37.55	36.77	.....
19	36.22	35.99	35.74	35.63	35.74	36.27	36.18	37.23	.....	37.54	36.76	.....
20	36.26	36.00	35.74	35.65	35.75	36.26	36.18	37.25	.....	37.51	36.74	.....

## 139-48-6ccdl--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	36.28	36.00	35.73	35.65	35.76	36.26	36.15	37.30	.....	37.45	36.67	.....
22	36.28	36.02	.....	35.63	35.77	36.27	36.16	37.36	.....	37.41	36.65	.....
23	36.21	36.02	.....	35.63	35.77	36.28	36.17	37.37	.....	37.38	36.65	.....
24	36.21	36.02	.....	35.63	35.76	36.29	36.17	37.39	.....	37.36	36.65	.....
25	36.22	35.99	.....	35.62	35.74	36.29	36.17	37.40	.....	37.32	36.64	.....
26	36.22	35.95	.....	35.62	35.76	36.28	36.16	37.41	.....	37.28	36.62	.....
27	36.20	35.97	.....	35.62	.....	36.25	36.16	37.43	.....	37.26	36.60	.....
28	36.21	35.97	.....	35.58	.....	36.24	36.18	37.43	38.02	37.23	36.57	.....
29	36.21	.....	.....	35.57	.....	36.24	.....	37.48	38.02	37.19	36.54	.....
30	36.21	.....	.....	35.56	.....	36.25	.....	37.48	38.02	37.14	36.53	.....
31	36.19	.....	35.73	.....	.....	.....	.....	37.50	.....	37.11	.....	.....

139-48-7acbl. City of Fargo. In Island Park. Drilled unused artesian well in glacial drift, diameter 10 inches, depth 228 feet. Highest water level 36.68 below lsd, July 1, 1940; lowest 43.75 below lsd, June 10, 1948. Records available: 1940-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	43.15	Apr. 7	42.45	July 13	42.99	Oct. 12	43.01
13	43.03	21	42.90	20	42.99	19	43.05
19	43.14	27	42.80	27	42.96	26	43.04
27	43.16	May 4	42.80	Aug. 3	42.99	Nov. 2	42.93
Feb. 2	43.12	11	44.88	10	42.20	9	42.88
9	43.13	18	42.85	24	43.07	16	42.92
16	43.00	26	42.82	31	43.09	23	42.88
23	43.02	June 1	42.80	Sept. 8	42.86	30	42.85
Mar. 4	42.89	8	42.86	14	43.00	Dec. 7	42.76
9	42.99	16	42.80	21	42.87	14	42.79
17	42.91	22	42.80	28	43.05	22	42.65
24	42.85	29	42.90	Oct. 5	43.00	28	42.62
31	42.81	July 6	43.26				

139-49-1cc1. City of Fargo. Drilled unused artesian well in glacial drift, diameter 8 inches, depth 196 feet. Highest water level 23.37 below lsd, Nov. 27, 1937; lowest 125.15 below lsd, Sept. 23, 1941. Records available: 1937-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	52.92	Apr. 6	51.50	July 6	55.97	Oct. 5	60.92
13	52.60	13	52.30	13	54.98	12	63.22
19	53.30	21	52.32	20	54.99	19	69.50
27	51.90	27	52.32	27	54.99	26	55.69
Feb. 2	52.60	May 4	54.10	Aug. 3	72.72	Nov. 2	65.85
9	52.55	11	54.75	10	67.97	9	56.79
16	51.60	18	54.70	17	74.38	16	54.45
23	51.60	26	54.72	24	74.52	23	53.95
Mar. 4	51.46	June 1	54.75	31	74.53	30	54.80
9	52.00	8	55.00	Sept. 8	74.25	Dec. 7	55.01
17	51.56	16	54.95	14	76.24	14	54.91
24	51.20	22	56.37	21	75.82	22	51.07
31	51.40	29	56.50	28	65.39	28	52.98

139-49-6ad1. Union Stockyards. Drilled unused artesian well in glacial drift, diameter 8 inches, depth 230 feet. Highest water level 24.90 below lsd, May 7, 1938; lowest 76.28 below lsd, Aug. 19, 1950. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	67.10	Apr. 6	65.83	July 6	65.50	Oct. 5	66.75
13	66.79	13	66.01	13	66.31	12	66.94
19	66.80	21	66.15	20	66.60	19	67.04
27	.....	27	66.23	27	66.84	26	67.28
Feb. 2	65.90	May 4	66.07	Aug. 3	67.02	Nov. 2	67.48
9	65.70	11	65.86	10	67.10	9	67.73
16	65.46	18	65.60	17	67.09	16	67.90
23	65.44	26	65.75	24	66.98	23	68.05
Mar. 4	65.94	June 1	65.80	31	67.07	30	68.34
9	65.60	8	65.94	Sept. 8	66.84	Dec. 7	67.73
17	65.64	16	66.00	14	66.50	14	68.35
24	65.60	22	65.24	21	66.43	21	69.11
31	65.65	29	65.47	28	67.51	28	67.50

140-52-14dd1. Mrs. Arthur D. South. Drilled unused water-table well in glacial Lake Agassiz deposits, diameter 24 inches, depth 25 feet. Highest water level 9.31 below lsd, May 23, 1950; lowest 21.36 below lsd, Mar. 10, 1940. Records available: 1937-51. July 10, 9.82. Measurement discontinued.

## NORTH DAKOTA, CAVALIER COUNTY

171

Cavalier County

161-60-14cd1. City of Langdon. Dug water-table well in Pierre shale, diameter 12 feet, depth 43 feet. Highest water level 15.82 below lsd, June 23, 1945; lowest 42.21 below lsd, Feb. 19, 1938. Records available: 1937-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	17.79	Apr. 7	17.95	July 7	16.57	Oct. 6	17.43
13	17.81	14	17.04	14	16.65	13	17.27
20	18.12	21	16.92	21	16.74	20	17.34
27	18.05	28	16.65	28	16.91	27	17.36
Feb. 3	18.02	May 5	16.55	Aug. 4	17.00	Nov. 3	17.47
10	18.11	12	16.36	11	17.03	10	17.49
17	18.23	19	16.25	18	17.04	17	17.67
24	18.31	26	16.35	25	17.02	24	17.61
Mar. 3	18.39	June 2	16.43	Sept. 1	17.04	Dec. 1	17.62
10	18.59	9	16.39	8	17.04	8	17.71
17	18.60	16	16.32	15	17.19	15	17.84
24	18.69	23	16.40	22	17.19	22	17.82
31	18.66	30	16.50	29	17.23	29	17.84

161-60-14dal. City of Langdon. Dug water-table well in glacial drift, depth 27 feet. Highest water level 1.29 below lsd, May 22, 1948; lowest 14.13 below lsd, July 13, 1940. Records available: 1937-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	8.11	Apr. 7	9.77	July 14	5.70	Oct. 13	5.54
13	8.30	14	8.72	21	5.99	20	5.69
20	8.64	21	8.01	28	6.27	27	5.66
27	8.83	28	6.91	Aug. 4	6.02	Nov. 3	5.87
Feb. 3	8.95	May 5	6.44	11	5.10	10	6.11
10	9.21	12	6.15	18	5.18	17	6.26
17	9.46	26	5.77	25	5.35	24	6.32
24	9.70	June 2	5.94	Sept. 1	4.98	Dec. 1	6.55
Mar. 3	9.90	9	5.40	8	4.80	8	6.67
10	10.08	16	5.09	15	5.01	15	6.78
17	10.16	23	5.43	22	5.31	22	6.99
24	10.35	30	5.34	29	5.36	29	7.29
31	10.34	July 7	5.49	Oct. 6	5.48		

161-60-14dc1. City of Langdon. Dug water-table well in Pierre shale, diameter 21 feet, depth 49 feet. Highest water level 13.64 below lsd, May 3, 1941; lowest 48.77 below lsd, Jan. 29, 1938. Records available: 1937-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	20.12	Apr. 7	18.34	July 7	19.34	Oct. 6	19.53
13	20.19	14	18.68	14	19.64	13	19.54
20	20.25	21	18.85	21	19.87	20	19.61
27	20.31	28	18.79	28	20.07	27	19.67
Feb. 3	20.34	May 5	18.85	Aug. 4	19.77	Nov. 3	19.72
10	20.40	12	18.93	11	19.26	10	19.83
17	20.47	19	18.97	18	19.45	17	19.90
24	20.52	26	19.12	25	19.55	24	19.92
Mar. 3	20.50	June 2	19.33	Sept. 1	19.23	Dec. 1	19.99
10	20.56	9	18.85	8	19.27	8	20.03
17	20.56	16	19.14	15	19.42	15	20.12
24	20.60	23	19.27	22	19.64	22	20.20
31	19.03	30	19.09	29	19.50	29	20.31

161-60-23bc1. City of Langdon. Dug water-table well in Pierre shale, size 10 by 10 feet, depth 52 feet. Highest water level 7.80 below lsd, Apr. 22, 1950; lowest 47.13 below lsd, Feb. 18, 1939. Records available: 1937-51.

## 1949

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	16.05	Apr. 2	18.25	July 2	10.30	Oct. 8	15.65
8	16.70	9	14.27	9	10.70	15	15.61
15	17.30	16	13.70	16	11.28	22	15.72
22	17.90	23	14.40	23	11.54	29	15.95
29	17.65	30	14.41	30	11.88	Nov. 5	16.25
Feb. 5	26.37	May 7	18.65	Aug. 6	12.15	12	16.60
12	26.68	14	9.65	13	12.59	19	31.60
19	26.40	21	9.42	20	12.97	26	17.40
26	25.87	28	9.51	27	13.43	Dec. 3	20.12
Mar. 5	18.23	June 4	9.55	Sept. 3	13.78	10	19.70
12	20.99	11	9.65	10	14.14	12	19.16
19	18.05	18	9.63	17	14.14	24	19.38
26	23.40	25	9.80	Oct. 1	15.30	31	24.32

161-60-23bc1--Continued.

1951

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	16.05	Apr. 7	9.32	July 7	11.48	Oct. 13	15.22
13	16.33		9.60	14	11.80		15.50
20	16.60		9.60	21	16.03		20.10
27	16.85		9.43	28	12.59		16.07
Feb. 3	17.12	May 5	9.46	Aug. 4	12.85	Nov. 3	16.38
10	17.35		9.60		11		17
17	17.62		9.78		18		24
24	17.90		9.11		25		17.14
Mar. 3	18.13	June 2	14.79	Sept. 1	13.70	Dec. 1	17.40
10	18.37		10.45		8		17.69
17	18.52		10.75		22		22
24	18.78		10.98		29		29
31	9.48	30	11.18	Oct. 6	14.99		18.26

Dickey County

129-59-7ba1. D. C. Botts. Driven water-table well in glacial Lake Dakota deposits, diameter  $1\frac{1}{2}$  inches, depth 18 feet. Highest water level 4.84 below lsd, May 5, 1945; lowest 13.39 below lsd, Sept. 2, 1940. Records available: 1940-49, 1951. July 27, 12.45; Oct. 20, 13.06.

130-59-9bc1. H. G. Martin, administrator. Driven water-table well in glacial Lake Dakota deposits, diameter  $1\frac{1}{4}$  inches, depth 17 feet. Highest water level 4.71 below lsd, May 5, 1945; lowest 14.17 below lsd, Sept. 12, 1940. Records available: 1940-51. July 27, 6.52; Oct. 20, 7.08.

131-59-28ba1. City of Oakes. Driven water-table well in glacial Lake Dakota deposits, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Highest water level 6.60 below lsd, May 17, 1948; lowest 10.71 below lsd, Jan. 2, 1940. Records available: 1940-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	9.01	Apr. 2	8.74	July 2	9.00	Oct. 1	9.64
8	9.00		8.63	9	9.02		9.63
15	9.06		8.67	16	9.16		9.60
22	9.00		8.64	23	9.29		9.59
30	9.10	May 7	8.60	30	9.76	Nov. 5	9.60
Feb. 5	9.10		8.58	Aug. 6	9.60		9.64
12	9.15		8.64		13		9.60
19	9.16		8.76		20		9.63
26	9.08	June 4	8.87		27		9.64
Mar. 5	9.06		8.92	Sept. 3	9.55	Dec. 3	9.62
12	9.14		9.08		10		9.63
20	9.12		9.17		17		9.65
26	9.00		9.17		24		9.70

131-59-29aa1. Fred Sletvold. Drilled unused water-table well in glacial Lake Dakota deposits, diameter 4 inches. Highest water level 8.03 below lsd, Oct. 7, 1945; lowest 12.45 below lsd, Sept. 7, 1949. Records available: 1943-50. Measurement discontinued.

131-59-33cc1. Lynus Sitts, Jr. Driven water-table well in glacial Lake Dakota deposits, diameter  $1\frac{1}{4}$  inches, depth 15 feet. Highest water level 5.48 below lsd, May 5, 1945; lowest 12.58 below lsd, Sept. 7, 1940. Records available: 1940-50. No measurement made in 1951.

Divide County

162-97-21bb. O. Bakken. Drilled unused well, diameter 18 inches. Highest water level 12.65 below lsd, May 8, 1951; lowest 17.37 below lsd, Sept. 22, 1949. Records available: 1945-51. May 8, 12.65; Aug. 14, 15.41. Measurement discontinued.

163-95-8bb. Owner unknown. Dug stock well. Highest water level 7.25 below lsd, May 8, 1951; lowest 16.05 below lsd, Sept. 9, 1945. Records available: 1945-51. May 8, 7.25; Aug. 14, 8.67. Measurement discontinued.

163-96-29dc. L. J. Brady. Dug domestic stock well. Highest water level 12.35 below lsd, May 8, 1951; lowest 26.05 below lsd, Sept. 8, 1945. Records available: 1945-51. May 8, 12.35; Aug. 14, 12.47. Measurement discontinued.

163-100-34aa1. A. U. Anderson. Drilled unused water-table well in glacial drift, diameter 22 inches, depth 23 feet. Highest water level 11.89 below lsd, July 12, 1944; lowest 16.68 below lsd, Oct. 25, 1941. Records available: 1940-46, 1949, 1951. June 23, 15.25.

#### Dunn County

141-92-28da. Owner unknown. Dug unused well, depth 62 feet. Highest water level 43.58 below lsd, May 16, 1950; lowest 44.93 below lsd, Oct. 5, 1946. Records available: 1946-51. Apr. 19, 43.96. Measurement discontinued.

145-92-25ad1. S. F. Lesmeister. Dug water-table well in Fort Union formation, diameter 4 feet, depth 17 feet. Highest water level 4.50 below lsd, June 11, 1943; lowest 11.97 below lsd, Oct. 1, 1947. Records available: 1942-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	8.79	Apr. 6	8.15	July 6	7.62	Oct. 5	8.71
12	8.86	13	8.07	13	7.74	12	8.78
19	8.91	20	7.99	20	7.82	19	8.68
26	8.95	27	7.96	27	8.63	26	8.74
Feb. 2	9.00	May 4	7.99	Aug. 3	8.80	Nov. 1	8.69
9	9.06	11	8.07	10	8.68	9	8.71
16	9.02	18	8.15	17	8.59	16	8.78
23	9.16	25	8.24	24	8.57	22	8.81
Mar. 2	9.13	June 1	8.22	31	8.42	30	8.73
9	9.06	8	8.13	Sept. 7	8.44	Dec. 7	8.70
16	8.89	15	8.06	14	8.69	14	8.80
23	8.57	22	7.82	21	8.82	21	8.78
30	8.27	29	7.65	28	8.72	28	8.68

#### Eddy County

148-65-21aa. H. Johnson. Drilled domestic well, diameter 24 inches, depth 28 feet. Highest water level 4.19 below lsd, May 16, 1950; lowest 22.06 below lsd, Oct. 13, 1948. Records available: 1946-51. May 21, 10.71. Measurement discontinued.

148-66-1aa. S. Nygaard. Dug domestic and stock well, diameter 36 inches, depth 11 feet. Highest water level 5.27 below lsd, May 4, 1950; lowest 8.48 below lsd, Oct. 4, 1949. Records available: 1946-51. May 21, 6.48. Measurement discontinued.

148-66-10dd. F. Duda. Drilled domestic and stock well, diameter 6 inches, depth 116 feet. Highest water level 25.17 below lsd, May 22, 1947; lowest 31.92 below lsd, Apr. 28, 1949. Records available: 1945-51. May 21, 28.90. Measurement discontinued.

149-63-32ab. S. Erman. Dug stock well, diameter 30 inches, depth 43 feet. Highest water level 13.61 below lsd, May 16, 1950; lowest 18.10 below lsd, Oct. 13, 1948. Records available: 1946-51. May 21, 16.00. Measurement discontinued.

149-64-28cc. R. Rosenberg. Dug unused well, diameter 30 inches, depth 40 feet. Highest water level 1.09 below lsd, May 16, 1950; lowest 18.70 below lsd, May 8, 1947. Records available: 1946-51. May 21, 4.55. Measurement discontinued.

149-64-31cb. E. Boyle. Dug unused well, diameter 30 inches, depth 10 feet. Highest water level 0.90 below lsd, May 16, 1950; lowest 7.39 below lsd, Oct. 20, 1950. Records available: 1946-51. May 21, 4.87. Measurement discontinued.

149-65-10dd. H. Pierson. Dug domestic and stock well, diameter 30 inches, depth 8 feet. Highest water level 0.50 above lsd, May 16, 1950; lowest 6.60 below lsd, Oct. 5, 1949. Records available: 1946, 1949-51. May 21, 5.39. Measurement discontinued.

149-65-35cb. J. Overdick. Dug domestic and stock well, diameter 36 inches, depth 10 feet. Highest water level 1.17 below lsd, May 16, 1950; lowest 7.39 below lsd, Oct. 5, 1949. Records available: 1946, 1949-51. May 21, 4.96. Measurement discontinued.

150-65-35cc. O. Anderson. Dug domestic well, diameter 30 inches, depth 12 feet. Highest water level 1.53 below lsd, May 16, 1950; lowest 7.14 below lsd, May 8, 1947. Records available: 1946-51. May 21, 5.57. Measurement discontinued.

150-66-9ba1. Elmer Moe. Dug water-table well in glacial drift, diameter 24 inches, depth 23 feet. Highest water level 17.48 below lsd, May 27, 1950; lowest 22.73 below lsd, Aug. 3, 1939. Records available: 1936, 1938-46, 1948-51. May 30, 18.14; Nov. 4, 19.50.

150-66-9bd1. Gilbert Olson. Dug water-table well in glacial drift, depth 17 feet. Highest water level 12.59 below lsd, May 27, 1950; lowest 15.69 below lsd, Mar. 28, 1935. Records available: 1935-36, 1938-51. May 30, 14.05.

150-66-9cb1. Stockyards. Dug water-table well in glacial drift, diameter  $1\frac{1}{2}$  inches, depth 12 feet. Highest water level 4.05 below lsd, Sept. 9, 1944; lowest 10.34 below lsd, Feb. 24, 1940. Records available: 1936-51. May 30, 6.91. Measurement discontinued.

150-66-9cd1. L. S. Rude. Dug water-table well in glacial drift, diameter 24 inches, depth 12 feet. Highest water level 6.99 below lsd, May 27, 1950; lowest 11.70 below lsd, Mar. 28, 1935. Records available: 1935-36, 1938-51. May 30, 8.90; Nov. 4, 10.34.

#### Grant County

136-86-20ac. C. E. Johnson. Drilled stock well, diameter 24 inches, depth 32 feet. Highest water level 27.96 below lsd, May 19, 1950; lowest 29.60 below lsd, Dec. 9, 1949. Records available: 1946-51. Apr. 18, 28.49. Measurement discontinued.

136-87-20dd. Albert Steigmyer. Dug stock well, diameter 4 feet, depth 17 feet. Highest water level 10.34 below lsd, May 19, 1950; lowest 16.04 below lsd, Oct. 19, 1948. Records available: 1946-51. Apr. 18, 12.09. Measurement discontinued.

136-88-18ca. John Renner. Dug stock well, diameter 4 feet, depth 30 feet. Highest water level 26.95 below lsd, May 19, 1950; lowest 28.64 below lsd, Dec. 9, 1949. Records available: 1946-51. Apr. 18, 27.72. Measurement discontinued.

#### Griggs County

144-59-20bc1. Griffith Loan & Investment Co. Drilled unused water-table well in glacial drift, diameter 5 inches, depth 51 feet. Highest water level 15.68 below lsd, Oct. 20, 1951; lowest 27.95 below lsd, Apr. 6, 1941. Records available: 1940-51. June 29, 17.11; Oct. 20, 15.68.

#### Hettinger County

133-93-5bd1. L. F. Everhart. Drilled unused water-table well in Fort Union formation, diameter 6 inches, depth 50 feet. Highest water level 48.32 below lsd, Oct. 15, 1946; lowest dry, Aug. 13, 1942. Records available: 1938-42, 1946-51. May 5, 45.90; June 6, 46.85; July 11, 47.44; Aug. 8, 48.92; Oct. 10, 46.20; Dec. 12, 45.72.

#### Kidder County

138-73-9cc1. Herman Peterson. Drilled unused well, diameter  $2\frac{1}{2}$  inches, depth 120 feet. Highest water level 5.57 below lsd, Oct. 26, 1948; lowest 8.97 below lsd, June 7, 1949. Records available: 1937-51. June 26, 6.69; Nov. 19, 7.75.

139-71-10bc1. Village of Tappen. Dug water-table well in glacial drift, diameter 8 feet, depth 15 feet. Highest water level 3.69 below lsd, May 26, 1950; lowest 12.46 below lsd, Feb. 1, 1941. Records available: 1940-51. June 26, 5.54; Nov. 10, 4.20.

139-71-27cc1. Philip Mitteleider. Dug water-table well in glacial drift, diameter 37 inches, depth 10 feet. Highest water level 1.51 above lsd, May 26, 1950; lowest 9.81 below lsd, July 25, 1940. Records available: 1940-51. June 26, 1.27; Nov. 10, 1.87.

139-72-10ca1. Chas. Woessner. Drilled water-table well in glacial drift, diameter 6 inches, depth 25 feet. Highest water level 8.87 below lsd, May 26, 1950; lowest 18.98 below lsd, July 22, 1940. Records available: 1940-51. June 26, 9.00; Nov. 10, 10.66. Measurement discontinued.

142-70-23ab1. Mrs. Fagereng. Drilled water-table well in glacial drift, diameter 18 to 12 inches. Highest water level 13.98 below lsd, June 16, 1948; lowest 23.93 below lsd, July 26, 1940. Records available: 1940-51. June 29, 21.25; Nov. 10, 18.55.

#### La Moure County

133-64-3bc1. City of Edgeley. Drilled unused water-table well in Pierre shale, diameter 6 inches, depth 92 feet. Highest water level 23.58 below lsd, June 14, 1948; lowest 28.05 below lsd, Aug. 29, 1946. Records available: 1940-51. June 27, 20.76; Oct. 20, 25.58.

McHenry County

152-79-6bc1. Minneapolis, St. Paul, & Sault Ste. Marie Railroad. Dug water-table well in glacial drift, diameter 10 feet, depth 23 feet. Highest water level 9.42 below lsd, July 15, 1951; lowest 22.86 below lsd, Nov. 10, 1940. Records available: 1940-48, 1950-51. July 15, 9.42; Nov. 10, 17.39.

154-80-14dc2. Albert Jensen. Drilled stock well, diameter 6 inches, depth 13 feet. Highest water level 2.75 below lsd, May 16, 1950; lowest 8.75 below lsd, Oct. 22, 1945. Records available: 1945-51. May 3, 3.19; Aug. 31, 6.56. Measurement discontinued.

154-80-34dd. Andrena Whitt. Drilled stock well, diameter 24 inches, depth 34 feet. Highest water level 8.60 below lsd, July 27, 1950; lowest 14.80 below lsd, Aug. 6, 1946. Records available: 1945-51. May 3, 11.24; Aug. 29, 9.54. Measurement discontinued.

155-79-8aa1. Cities Service. Drilled water-table well in glacial drift, diameter 12 inches, depth 9 feet. Highest water level 3.29 below lsd, Oct. 28, 1941; lowest 10.85 below lsd, Sept. 25, 1946. Records available: 1940-42, 1945-51. June 14, 5.61. Measurement discontinued.

156-76-11bc1. City of Towner. Dug water-table well in glacial drift, diameter 15 feet, depth 17 feet. Highest water level 10.05 below lsd, Aug. 19, 1945; lowest 14.19 below lsd, Aug. 1, 1940. Measurement discontinued. Records available: 1940-50.

156-78-36bc1. Denbigh Forest Experimental Station well 1. U. S. Forest Service. Dug unused water-table well in glacial Lake Souris deposits, size 4 by 4 feet, depth 12 feet. Highest water level 1.34 below lsd, Sept. 21, 1948; lowest 8.18 below lsd, Nov. 15, 1940. Records available: 1932-41, 1943-51. June 14, 3.06.

156-78-36bc2. Denbigh Forest Experimental Station well 2. U. S. Forest Service. Dug unused water-table well in glacial Lake Souris deposits, size 4 by 4 feet, depth 12 feet. Highest water level 1.06 below lsd, May 24, 1950; lowest 9.06 below lsd, Nov. 15, 1940. Records available: 1932-41, 1943-51. June 20, 1.24; Nov. 11, 2.28.

156-78-36bc3. Denbigh Forest Experimental Station well 3. U. S. Forest Service. Dug unused water-table well in glacial Lake Souris deposits, size 4 by 4 feet, depth 12 feet. Highest water level 1.47 below lsd, June 20, 1951; lowest 8.30 below lsd, Nov. 15, 1940. Records available: 1932-41, 1945-48, 1951. June 20, 1.47.

156-78-36bc4. Denbigh Forest Experimental Station well 4. U. S. Forest Service. Dug unused water-table well in glacial Lake Souris deposits, size 4 by 4 feet, depth 10 feet. Highest water level 1.24 below lsd, June 20, 1951; lowest dry, Apr. 20, 1940. Records available: 1932-41, 1944-48, 1951. June 20, 1.24; Nov. 11, 3.33.

156-78-36dd1. Denbigh Forest Experimental Station well 5. U. S. Forest Service. Dug unused water-table well in glacial Lake Souris deposits, size 4 by 4 feet, depth 10 feet. Highest water level 2.24 below lsd, June 20, 1951; lowest 8.41 below lsd, Nov. 15, 1941. Records available: 1932-41, 1944-47, 1951. June 20, 2.24; Nov. 11, 3.36.

156-79-33dc1. Harold H. Sullwold. Drilled unused water-table well in glacial drift, diameter 12 inches, depth 38 feet. Highest water level 4.68 below lsd, May 24, 1950; lowest 14.62 below lsd, Nov. 11, 1940. Records available: 1940-51. June 19, 6.00; Nov. 11, 8.50.

156-80-16cd. Owner unknown. Drilled unused well, diameter 18 inches, depth 24 feet. Highest water level 11.65 below lsd, May 13, 1948; lowest 21.05 below lsd, July 14, 1949. Records available: 1945-51. May 4, 17.61; Aug. 28, 18.13.

157-75-31dc1. U. S. Forest Service. Dug water-table well in glacial drift, diameter 12 inches, depth 12 feet. Highest water level 2.11 below lsd, June 23, 1943; lowest 8.08 below lsd, Aug. 1, 1940. Records available: 1940-50. No measurement made in 1951.

McIntosh County

132-71-15aa1. City of Wishek. Dug water-table well in glacial drift, diameter 6 feet, depth 27 feet. Highest water level 19.09 below lsd, Oct. 7, 1944; lowest 25.03 below lsd, Sept. 15, 1948. Records available: 1940-46, 1948-51.

## 132-71-15aa1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	23.25	Apr. 19	23.17	July 2	23.18	Sept. 25	22.89
	23.26		25		9		22.96
	23.34		May 4		16		22.97
Feb. 12	23.32	16	23.16	30	23.12	23	22.98
	23.39		23.55		23.06		22.98
	23.41		23.36		23.24		22.99
Mar. 1	23.41	28	23.57	Aug. 8	23.03	Nov. 5	23.01
	23.41		June 4		22.96		23.15
	23.39		23.36		22.97		22.97
Apr. 4	23.45	11	23.26	Sept. 6	22.97	Dec. 6	23.06
	23.30	18	23.24		22.97		23.06
	23.11	25	23.17				

132-71-24ad1. Federal Land Bank. Driven water-table well in glacial drift, diameter  $1\frac{1}{2}$  inches, depth 14 feet. Highest water level 2.09 below lsd, Oct. 27, 1951; lowest 11.01 below lsd, Nov. 23, 1940. Records available: 1940-51. June 26, 4.60; Oct. 27, 2.09.

McKenzie County

150-100-12cc1. Chas. E. Fleck. Drilled water-table well in Fort Union formation, diameter 6 inches, depth 138 feet. Highest water level 113.18 below lsd, Dec. 1, 1951; lowest 114.94 below lsd, Mar. 31, 1945. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	113.54	Apr. 21	113.50	July 14	113.38	Oct. 13	113.40
	113.57		113.40		113.53		113.23
	113.81		May 5		113.35		113.25
Feb. 3	113.57	12	113.25	Aug. 4	113.23	Nov. 3	113.71
	113.35		19		113.45		113.55
	113.45		26		113.50		113.39
Mar. 3	113.25	June 2	113.41	Sept. 1	113.40	Dec. 1	113.18
	113.35		9		113.35		113.55
	113.50		16		113.54		113.45
Apr. 7	113.57	23	113.35	Oct. 6	113.42	22	113.55
	113.45	30	113.42		113.34		29
	113.59	July 7	113.31				

McLean County

149-84-15bc1. State of North Dakota. Drilled unused water-table well in Fort Union formation, diameter 6 inches, depth 62 feet. Highest water level 40.66 below lsd, June 25, 1951; lowest 47.43 below lsd, Mar. 22, 1941. Records available: 1937-49, 1951. June 25, 40.66.

Mercer County

143-88-4cd3. Robert Keogh. Drilled stock well, depth 30 feet. Highest water level 10.59 below lsd, May 16, 1950; lowest 18.68 below lsd, Dec. 7, 1949. Records available: 1948-51. Apr. 19, 15.01. Measurement discontinued.

143-88-14bb. Owner unknown. Dug unused well, diameter 24 inches, depth 21 feet. Highest water level 9.08 below lsd, July 16, 1947; lowest 14.43 below lsd, May 13, 1947. Records available: 1948-51. Apr. 19, 7.92. Measurement discontinued.

143-89-10cc1. Owner unknown. Drilled unused well, diameter 5 inches, depth 100 feet. Highest water level 48.17 below lsd, Apr. 19, 1951; lowest 49.70 below lsd, Sept. 14, 1950. Records available: 1946-51. Apr. 19, 48.17. Measurement discontinued.

143-89-12ba. H. D. Spear. Driven stock well, diameter 5 inches, depth 37 feet. Highest water level 8.89 below lsd, Apr. 20, 1949; lowest 19.60 below lsd, Oct. 18, 1948. Records available: 1946-51. Apr. 19, 15.67. Measurement discontinued.

143-89-21aa. Paul Goehring. Dug domestic well, diameter 36 inches, depth 28 feet. Highest water level 21.20 below lsd, Apr. 19, 1951; lowest 26.83 below lsd, Oct. 2, 1946. Records available: 1946-49, 1951. Apr. 19, 21.20. Measurement discontinued.

144-87-14aa. Otto E. Oster. Dug domestic and stock well, diameter 36 inches. Highest water level 12.21 below lsd, Apr. 20, 1949; lowest 15.77 below lsd, Oct. 2, 1946. Records available: 1946-51. Apr. 19, 12.95. Measurement discontinued.

144-88-25cb. John Meyers. Drilled domestic well, depth 63 feet. Highest water level 22.98 below lsd, Sept. 14, 1950; lowest 29.53 below lsd, May 13, 1947. Records available: 1946-51. Apr. 19, 23.83. Measurement discontinued.

144-88-25cc. D. Koehler. Drilled domestic and stock well, diameter 18 inches, depth 23 feet. Highest water level 11.15 below lsd, May 16, 1950; lowest 19.84 below lsd, Oct. 2, 1946. Records available: 1946-51. Apr. 19, 13.88. Measurement discontinued.

#### Morton County

136-81-6dc1. Joe Lanz, Jr. Drilled used water-table well in Hell Creek formation, diameter 24 inches, depth 67 feet. Highest water level 20.14 below lsd, July 10, 1950; lowest 25.23 below lsd, Apr. 15, 1941. Records available: 1941-51. July 11, 21.30; Nov. 24, 20.22.

137-84-1dd1. Stark. Dug domestic and stock well, diameter 5 inches, depth 18 feet. Highest water level 6.47 below lsd, May 17, 1950; lowest 12.73 below lsd, Oct. 19, 1948. Records available: 1946-51. Apr. 17, 9.14. Measurement discontinued.

137-84-10cc1. Clemens Schmitz. Drilled stock well, diameter 24 inches, depth 47 feet. Highest water level 31.86 below lsd, July 17, 1950; lowest 32.54 below lsd, Nov. 1, 1950. Records available: 1946-51. Apr. 17, 32.43. Measurement discontinued.

139-82-34db. Owner unknown. Dug unused well, diameter 4 feet, depth 57 feet. Highest water level 28.23 below lsd, May 17, 1950; lowest 37.59 below lsd, May 16, 1947. Records available: 1946-51. Apr. 17, 33.16. Measurement discontinued.

139-85-15cc1. Fred Lehde. Drilled water-table well in Hell Creek formation, diameter 24 to 16 inches, depth 72 feet. Highest water level 28.97 below lsd, Apr. 7, 1951; lowest 36.79 below lsd, May 31, 1941. Records available: 1941-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	31.77	Apr. 7	28.97	July 3	30.55	Sept. 29	31.99
6	31.84	14	29.47	11	30.70	Oct. 13	32.31
13	31.93	21	31.01	15	30.85	21	31.64
20	31.99	28	30.79	30	31.44	Nov. 1	32.43
28	32.05	May 5	30.60	Aug. 4	31.48	3	32.60
Feb. 5	32.08	12	30.63	13	31.65	12	32.60
11	32.10	19	30.66	18	31.61	17	32.67
19	31.72	26	30.77	26	31.54	24	32.77
Mar. 3	31.68	June 2	31.02	Sept. 1	31.67	Dec. 4	32.92
13	32.35	11	30.89	9	31.25	8	32.91
24	32.53	16	30.91	16	31.58	15	32.99
31	30.19	25	30.66	24	31.86	29	33.01

#### Mountrail County

152-89-6aa1. Emil Molter. Drilled unused water-table well, diameter 24 inches, depth 64 feet. Highest water level 41.22 below lsd, July 14, 1951; lowest 48.28 below lsd, July 10, 1944. Records available: 1938-47, 1949, 1951. July 14, 41.22.

#### Nelson County

152-58-18daa. Ole Norum. U. S. Geol. Survey test hole. Drilled unused water-table well in glacial drift, diameter 4 inches, depth 20 feet. Highest water level 0.30 below lsd, May 13, 1950; lowest 6.80 below lsd, Mar. 19, 1949. Records available: 1948-51. Measurement discontinued.

Jan. 6	5.20	Feb. 24	5.45	Apr. 14	3.00	May 26	4.25
13	5.20	Mar. 3	5.45	21	3.00	June 2	4.20
20	5.25	10	5.50	28	2.60	9	4.15
27	5.25	17	4.40	May 5	2.60	16	4.30
Feb. 3	5.30	24	4.20	12	2.55	23	4.40
10	5.40	31	3.90	19	4.20	30	4.50
17	5.40	Apr. 7	3.30				

Pembina County

160-56-8dca1. Paul B. Olafson. Dug water-table well in glacial Lake Agassiz deposits, diameter 4 feet, depth 10 feet. Highest water level 2.88 below lsd, May 20, 1946; lowest 7.55 below lsd, Aug. 26, 1946. Records available: 1946-51. May 22, 3.09; Nov. 17, 4.80.

160-56-9dcc1. J. Anderson. Dug water-table well in glacial Lake Agassiz deposits, diameter 40 inches, depth 18 feet. Highest water level 4.60 below lsd, Aug. 1, 1950; lowest 7.13 below lsd, Nov. 17, 1951. Records available: 1946-51. May 22, 5.66; Nov. 17, 7.13.

160-56-16aaa1. S. J. Hanson. Dug water-table well in glacial Lake Agassiz deposits, depth 12 feet. Highest water level 5.31 below lsd, May 22, 1951; lowest 8.85 below lsd, Sept. 16, 1947. Records available: 1946-51. May 22, 5.31; Nov. 17, 7.03.

160-56-16aab1. S. J. Hallgrimson. Dug water-table well in glacial Lake Agassiz deposits, depth 22 feet. Highest water level 5.40 below lsd, Aug. 1, 1950; lowest 11.97 below lsd, Sept. 16, 1947. Records available: 1946-51. May 22, 5.53; Nov. 17, 8.70.

160-56-16aab3. H. J. Hallgrimson. Dug water-table well in glacial Lake Agassiz deposits, depth 19 feet. Highest water level 2.50 below lsd, May 15, 1948; lowest 11.50 below lsd, Sept. 15, 1947. Records available: 1946-51. May 22, 4.77. Measurement discontinued.

160-56-16aab4. H. J. Hjaltalin. Dug water-table well in glacial Lake Agassiz deposits, diameter 5 feet, depth 17 feet. Highest water level 4.50 below lsd, Aug. 24, 1946; lowest 11.70 below lsd, Sept. 24, 1946. Records available: 1946-51. May 22, 5.45; Nov. 17, 8.14.

160-56-16acc1. H. Olafson. Dug water-table well in glacial Lake Agassiz deposits, size 6 by 6 feet, depth 12 feet. Highest water level 2.74 below lsd, May 22, 1951; lowest 7.25 below lsd, Sept. 16, 1947. Records available: 1946-51. May 22, 2.74. Measurement discontinued.

160-56-16ada1. Oscar Byron. Dug water-table well in glacial Lake Agassiz deposits, diameter 20 inches, depth 20 feet. Highest water level 8.77 below lsd, Aug. 1, 1950; lowest 17.89 below lsd, Sept. 24, 1946. Records available: 1946-51. May 22, 10.03. Measurement discontinued.

160-56-16ada3. Walter Hallison. Drilled water-table well in glacial Lake Agassiz deposits, diameter 20 inches, depth 17 feet. Highest water level 8.30 below lsd, Sept. 24, 1946; lowest 15.37 below lsd, Sept. 25, 1948. Records available: 1946-51. May 22, 10.00. Measurement discontinued.

161-56-22bb1. E. J. Lander Co. Dug water-table well in glacial Lake Agassiz deposits, diameter 5 feet, depth 14 feet. Highest water level 3.02 below lsd, May 20, 1950; lowest 11.76 below lsd, Apr. 26, 1941. Records available: 1941-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	7.81	Apr. 14	6.91	July 14	7.47	Oct. 13	8.02
13	7.89	21	6.72	21	6.54	20	8.04
20	7.96	28	6.30	28	6.98	27	8.04
Feb. 3	8.00	May 5	5.90	Aug. 4	7.20	Nov. 3	8.06
10	7.73	12	5.85	11	7.32	10	8.55
17	8.06	19	6.00	18	7.28	17	8.16
24	8.18	26	6.18	25	7.18	24	8.16
Mar. 3	8.20	June 2	6.89	Sept. 1	7.05	Dec. 1	8.16
10	8.22	9	6.49	8	6.78	8	8.20
17	8.26	16	6.65	15	6.75	15	8.20
24	8.31	23	6.87	22	7.88	22	8.22
31	7.88	30	8.06	29	7.98	29	8.34
Apr. 7	6.95	July 7	7.27	Oct. 6	8.02		

162-53-31cc1. Garnett A. Snell. Dug water-table well in glacial Lake Agassiz deposits, size 4 by 4 feet, depth 17 feet. Highest water level 3.92 below lsd, May 20, 27, 1950; lowest 12.07 below lsd, Oct. 2, 1943. Records available: 1941-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	8.38	Apr. 7	7.92	July 7	7.47	Oct. 6	9.56
13	8.38	14	7.32	14	7.81	13	9.46
20	8.46	21	6.81	21	8.17	20	9.46
27	8.62	28	5.88	28	8.60	27	9.50
Feb. 3	8.72	May 5	5.53	Aug. 4	9.00	Nov. 3	9.45
10	8.74	12	5.35	11	9.17	10	9.47
17	8.78	19	5.47	18	9.35	17	9.58
24	8.86	26	5.89	25	9.45	24	9.41
Mar. 3	9.00	June 2	6.21	Sept. 1	9.55	Dec. 1	9.47
10	9.02	9	6.21	8	9.43	8	9.53
17	9.08	16	6.43	15	9.55	15	9.54
24	9.11	23	7.23	22	9.64	22	9.48
31	8.54	30	7.16	29	9.56	29	9.50

162-55-3dd1. Albert C. McCurdy. Dug unused water-table well in glacial Lake Agassiz deposits, diameter 5 feet, depth 17 feet. Highest water level 2.88 below lsd, May 19, 1950; lowest 11.98 below lsd, Apr. 1, 1944. Records available: 1941-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	8.71	Apr. 15	7.97	July 8	7.84	Oct. 14	8.92
21	8.20	22	7.88	15	8.03	21	8.95
28	8.92	29	7.73	22	8.22	28	8.97
Feb. 4	8.92	May 6	7.55	Aug. 5	8.40	Nov. 4	8.99
11	9.30	12	7.24	8.22	11	9.03	
18	9.51	20	7.15	8.76	18	9.02	
25	9.51	27	7.18	8.80	25	9.07	
9.56	7.30	8.81	Dec. 2				
11	9.61	10	7.30	Sept. 2	8.85	9	9.12
18	9.72	17	7.32	9	8.68	16	9.13
25	9.78	24	7.51	16	8.70	23	9.19
Apr. 1	9.24	July 1	7.69	23	8.86	30	9.21
	8.38						

162-55-3dd2. Albert C. McCurdy. Drilled water-table well in glacial Lake Agassiz deposits, diameter 8 inches, depth 21 feet. Highest water level 6.04 below lsd, Apr. 24, 1946; lowest 13.45 below lsd, Sept. 18, 1947. Records available: 1946-50. Measurement discontinued.

#### Ramsey County

153-64-2dac. Howard Maher. Drilled unused artesian (?) well in Pierre shale, diameter 4 inches, depth 67 feet. Highest water level 2.98 below lsd, Oct. 23, 1950; lowest 4.24 below lsd, May 29, 1951. Records available: 1950-51. Mar. 23, 3.94; May 29, 4.24; Nov. 3, 4.10.

153-64-5aa1. Ray Young. Dug water-table well in glacial drift, diameter 4 feet, depth 45 feet. Highest water level 20.60 below lsd, May 24, 1950; lowest 32.31 below lsd, June 22, 1944. Records available: 1942-50. No measurement made in 1951.

153-64-19da1. Formerly 153-64-25ca1. Camp Grafton Military Reserve. Drilled water-table well in glacial drift, diameter 4 inches, depth 148 feet. Highest water level 50.57 below lsd, Oct. 23, 1950; lowest 59.44 below lsd, May 29, 1951. Records available: 1943-51. May 29, 59.44.

153-65-14ac1. Mrs. Bonnie Boland. Drilled unused artesian well in glacial drift, diameter 4 inches, depth 285 feet. Highest water level 52.65 below lsd, May 29, 1951; lowest 59.32 below lsd, Oct. 14, 1944. Records available: 1937-51. May 29, 52.65; Nov. 3, 53.01.

154-64-34ddd6. Fairmount Foods Co. Drilled unused artesian (?) well in Pierre shale, diameter 6 inches, depth 112 feet, cased to 60. Highest water level 51.09 below lsd, Oct. 10, 1950; lowest 62.34 below lsd, Nov. 15, 1950. Records available: 1950-51. Mar. 23, 57.46; June 1, 59.76; Nov. 3, 56.18.

154-64-35cbc. William Johnson. Drilled unused artesian (?) well in Pierre shale, diameter 4 inches, depth 91 feet. Highest water level 27.79 below lsd, Oct. 23, 1950; lowest 31.19 below lsd, May 29, 1951. Records available: 1950-51. Mar. 22, 29.64; May 29, 31.19; Nov. 3, 29.62.

#### Ransom County

136-56-3ab1. Melford Skramstad. Drilled water-table well in glacial drift, diameter 24 inches, depth 32 feet. Highest water level 9.81 below lsd, Nov. 7, 1944; lowest 26.87 below lsd, Apr. 7, 1941. Records available: 1940-46; 1948-50. Measurement discontinued.

#### Renville County

158-82-7cc. J. T. Phillips. Dug stock well, diameter 36 inches, depth 12 feet. Highest water level 0.27 below lsd, May 12, 1950; lowest 5.26 below lsd, Oct. 31, 1947. Records available: 1945-51. May 16, 1.46; Aug. 29, 4.89. Measurement discontinued.

158-83-20cc. Owner unknown. Dug unused well, diameter 4 feet, depth 18 feet. Highest water level 2.73 below lsd, May 12, 1950; lowest 7.65 below lsd, Oct. 31, 1947. Records available: 1945-51. May 16, 4.03. Measurement discontinued.

158-84-35dd. H. J. Linnards. Drilled unused well, diameter 18 inches, depth 52 feet. Highest water level 11.74 below lsd, May 16, 1951; lowest 23.45 below lsd, Oct. 6, 1945. Records available: 1945-51. May 16, 11.74; Aug. 26, 17.01. Measurement discontinued.

159-84-10cd. J. O. Bolander. Dug domestic stock well, depth 12 feet. Highest water level 2.95 below lsd, May 3, 1949; lowest 7.15 below lsd, Oct. 6, 1945. Records available: 1945-51. May 15, 3.19; Aug. 22, 5.88. Measurement discontinued.

159-85-7bc1. Ralph Johnson. Drilled domestic well, diameter 18 inches. Highest water level 0.86 below lsd, May 7, 1948; lowest 16.30 below lsd, Oct. 5, 1945. Records available: 1945-51. May 15, 5.62; Aug. 16, 6.52. Measurement discontinued.

159-85-12aa. J. P. Lundberg. Dug domestic well, diameter 36 inches, depth 14 feet. Highest water level 2.62 below lsd, May 7, 1948; lowest 12.70 below lsd, Apr. 8, 1947. Records available: 1945-51. May 15, 2.65; Aug. 22, 11.53. Measurement discontinued.

160-85-9cc. Owner unknown. Dug domestic well, diameter 18 inches, depth 18 feet. Highest water level 0.99 below lsd, May 15, 1951; lowest 8.46 below lsd, Nov. 11, 1947. Records available: 1946-51. May 15, 0.99. Measurement discontinued.

161-84-6cb. Owner unknown. Dug domestic and stock well, diameter 4 feet. Highest water level 0.28 below lsd, May 6, 1948; lowest 8.15 below lsd, Sept. 28, 1945. Records available: 1945-51. May 10, 1.15; Aug. 21, 5.88. Measurement discontinued.

161-84-13cd2. Fred Paris. Drilled unused well, diameter 18 inches, depth 13 feet. Highest water level 2.00 below lsd, May 10, 1950; lowest 12.22 below lsd, Apr. 21, 1941. Records available: 1940-51. May 10, 3.58; Aug. 21, 6.76. Measurement discontinued.

161-85-20aa1. Minnesota Trust Co. Drilled unused well in Fort Union formation, diameter 4 inches, depth 400 feet. Highest water level 77.46 below lsd, June 21, 1951; lowest 83.04 below lsd, Sept. 26, 1946. Records available: 1937-51. May 10, 82.18; June 21, 77.46; Aug. 21, 82.41.

161-85-34cc1. Harry Klatt. Drilled domestic well, diameter 18 inches, depth 23 feet. Highest water level 2.44 below lsd, May 10, 1951; lowest 16.87 below lsd, Apr. 5, 1947. Records available: 1945-51. May 10, 2.44; Aug. 21, 9.55. Measurement discontinued.

162-84-9cd. Owner unknown. Dug unused well, diameter 6 feet, depth 19 feet. Highest water level 0.47 below lsd, May 6, 1948; lowest 15.19 below lsd, Apr. 7, 1947. Records available: 1945-51. May 10, 6.84; Aug. 21, 9.80. Measurement discontinued.

162-86-13ab1. August Bahl. Dug unused well, diameter 10 inches, depth 15 feet. Highest water level 0.66 below lsd, May 6, 1948; lowest 11.01 below lsd, Oct. 25, 1946. Records available: 1945-51. May 10, 3.23; Aug. 23, 7.16. Measurement discontinued.

162-87-17aa. Owner unknown. Dug domestic and stock well, diameter 4 feet, depth 30 feet. Highest water level 6.40 below lsd, May 8, 1948; lowest 19.80 below lsd, Sept. 24, 1945. Records available: 1945-51. May 10, 7.58. Measurement discontinued.

163-85-5cd. George Eltz. Dug unused well, diameter 30 inches, depth 19 feet. Highest water level 3.77 below lsd, May 6, 1948; lowest 13.76 below lsd, Oct. 29, 1947. Records available: 1945-51. May 10, 3.90; Aug. 21, 7.36. Measurement discontinued.

163-85-36aa. Owner unknown. Dug stock well. Highest water level 1.36 below lsd, May 6, 1948; lowest 9.06 below lsd, Aug. 21, 1951. Records available: 1945-51. May 10, 1.59; Aug. 21, 9.06. Measurement discontinued.

163-86-9aa. Owner unknown. Dug domestic well, diameter 36 inches. Highest water level 3.30 below lsd, May 8, 1950; lowest 11.00 below lsd, Oct. 25, 1946. Records available: 1945-51. May 10, 7.13; Aug. 21, 7.99. Measurement discontinued.

163-87-5dc. Owner unknown. Dug stock well, diameter 36 inches, depth 15 feet. Highest water level 1.11 above lsd, May 9, 1950; lowest 5.32 below lsd, Aug. 21, 1951. Records available: 1945-51. May 10, 0.74; Aug. 21, 5.32. Measurement discontinued.

#### Richland County

133-52-32cd1. Owner unknown. Driven water-table well in glacial Lake Agassiz deposits, diameter 1½ inches, depth 20 feet. Highest water level 3.58 below lsd, Apr. 16, 1946; lowest 7.76 below lsd, June 13, 1948. Records available: 1946-51. June 28, 6.57; Oct. 20, 5.18.

133-52-33ccdd. John Liljemark. Driven water-table well in glacial Lake Agassiz deposits, diameter 1½ inches, depth 20 feet. Highest water level 0.75 below lsd, June 27, 1943; lowest 8.63 below lsd, Mar. 16, 1946. Records available: 1937-51.

## 133-52-33cd--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	7.47	Apr. 7	3.06	July 7	3.52	Oct. 6	6.27
13	7.52	14	2.85	14	4.60	13	6.10
20	7.56	21	3.18	21	5.43	20	6.02
27	7.60	28	3.77	28	6.02	27	6.01
Feb. 3	7.77	May 5	3.97	Aug. 4	6.52	Nov. 3	5.85
10	7.77	12	4.52	11	6.19	10	5.52
17	7.81	19	4.85	18	6.43	17	5.68
25	7.85	26	4.43	25	6.60	24	5.60
Mar. 4	7.72	June 2	2.52	Sept. 1	6.19	Dec. 1	5.68
11	7.72	9	2.68	8	6.27	8	4.85
17	7.31	16	4.01	15	6.60	12	5.10
24	7.27	23	4.06	22	6.77	22	6.10
31	5.77	30	4.68	29	6.77	29	6.39

Sheridan County

145-75-28bb1. Bank of North Dakota. Drilled well, diameter 2 inches, reported depth 300 feet. Highest water level 53.90 below lsd, Oct. 24, 1949; lowest 56.51 below lsd, Oct. 26, 1940. Records available: 1938-47, 1949. No measurement made in 1951.

Slope County

134-100-14ad1. Arthur Nesseth. Drilled water-table well in Fort Union formation, diameter 24 inches, depth 67 feet. Highest water level 14.07 below lsd, Oct. 7, 1947; lowest 18.91 below lsd, Apr. 17, 1941. Records available: 1940-48, 1951. Apr. 4, 15.33; May 5, 15.54; June 12, 15.50; July 7, 15.68; Aug. 8, 15.69; Nov. 24, 15.34; Dec. 12, 15.52.

Stark County

139-96-3bbc1. City of Dickinson. Drilled water-table well in Fort Union formation, diameter 8 inches, depth 191 feet. Highest water level 53.51 below lsd, Jan. 15, 1945; lowest 145.06 below lsd, Apr. 17, 1950. Records available: 1947-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	139.85	134.50	.....	132.00	120.90	120.38	136.81	124.12	126.10	.....	136.50
2	121.10	139.81	134.62	.....	133.10	130.00	112.62	137.43	117.32	129.14	.....	136.68
3	127.45	140.14	130.10	.....	133.50	122.20	123.28	137.68	114.30	131.10	.....	136.15
4	127.75	140.22	129.22	.....	135.10	117.30	117.92	137.72	125.72	131.92	.....	136.92
5	124.48	140.43	133.18	133.73	135.70	123.92	122.02	137.95	122.83	132.75	.....	136.60
6	128.98	140.88	133.70	132.60	134.42	124.46	122.85	136.61	.....	133.66	.....	136.78
7	123.09	140.88	128.22	130.10	135.52	126.50	123.82	136.90	118.10	133.90	135.25	136.92
8	131.80	140.65	134.86	131.93	134.72	127.42	.....	137.19	.....	131.21	137.00	136.28
9	133.77	140.02	132.50	131.35	134.98	129.33	.....	137.39	116.60	130.80	136.55	136.71
10	.....	139.50	130.33	129.10	136.05	127.93	.....	137.82	115.34	132.40	135.03	135.76
11	.....	129.95	124.90	.....	136.22	129.30	.....	137.78	.....	133.94	135.41	136.00
12	.....	139.70	129.50	129.60	136.53	130.44	.....	136.70	.....	134.12	136.10	137.08
13	.....	140.12	126.55	131.91	137.31	131.10	.....	134.98	123.30	134.87	136.51	137.82
14	.....	139.37	126.82	122.75	137.93	131.60	.....	133.47	123.78	135.23	135.48	138.32
15	.....	138.80	127.42	125.10	136.92	132.60	.....	135.80	.....	135.62	137.85	133.48
16	136.40	138.82	130.41	130.80	136.58	133.28	.....	133.20	.....	136.15	138.40	132.45
17	136.55	135.27	125.85	132.54	130.30	132.67	.....	133.50	.....	136.19	138.48	136.48
18	137.13	134.34	128.78	129.72	135.22	132.29	.....	131.74	.....	135.36	135.40	137.84
19	137.78	133.75	132.40	.....	134.72	129.79	.....	130.12	.....	.....	.....	138.38
20	138.02	136.10	133.67	.....	129.67	.....	.....	131.39	122.90	.....	136.67	138.58
21	137.73	136.45	127.48	.....	128.88	.....	.....	130.32	116.60	.....	137.21	138.70
22	.....	134.90	132.20	.....	133.94	121.30	.....	128.35	111.62	136.72	135.50	139.28
23	134.60	135.80	132.20	.....	133.90	117.37	.....	129.62	109.92	136.78	136.14	139.61
24	135.30	131.55	128.45	132.18	134.90	115.30	.....	.....	109.10	137.12	136.20	139.65
25	135.30	130.90	129.65	133.42	135.15	122.01	.....	128.92	108.42	137.70	137.15	139.93
26	135.82	134.40	131.98	131.18	122.72	133.93	127.60	119.68	137.83	137.32	139.11	.....
27	136.21	135.02	132.57	131.30	121.43	134.20	125.80	119.95	137.72	137.72	139.23	.....
28	136.48	132.50	133.62	.....	123.81	135.20	127.69	112.52	137.78	.....	137.25	.....
29	136.53	.....	134.07	133.50	124.73	135.85	127.37	119.14	138.12	132.30	138.12	.....
30	139.67	.....	130.70	132.83	115.92	135.93	120.60	121.23	.....	136.53	138.40	.....
31	139.92	.....	.....	132.80	136.48	116.72	.....	.....	.....	137.23	.....	.....

139-96-12bb. S. L. Carroll. Drilled domestic and stock well, diameter 24 inches, depth 68 feet. Highest water level 48.95 below lsd, Dec. 8, 1949; lowest 52.90 below lsd, Sept. 20, 1946. Records available: 1946-51. Apr. 19, 50.76. Measurement discontinued.

139-96-14ab. F. Johnson. Drilled well, diameter 12 inches, depth 81 feet. Highest water level 58.71 below lsd, May 15, 1950; lowest 73.62 below lsd, Dec. 8, 1949. Records available: 1946-51. Apr. 19, 58.85. Measurement discontinued.

139-97-14da. Owner unknown. Drilled domestic well, diameter 5 inches, depth 30 feet. Highest water level 6.12 below lsd, Apr. 19, 1951; lowest 23.90 below lsd, Sept. 13, 1946. Records available: 1946-51. Apr. 19, 6.12. Measurement discontinued.

#### Stutsman County

137-63-11aa. E. Hanson. Drilled domestic and stock well, diameter 18 inches, depth 22 feet. Highest water level 11.19 below lsd, July 19, 1950; lowest 13.60 below lsd, Apr. 26, 1949. Records available: 1946-51. May 21, 12.66. Measurement discontinued.

138-62-4dc. J. Crouch. Dug unused well, diameter 36 inches, depth 19 feet. Highest water level 8.73 below lsd, July 19, 1950; lowest 18.33 below lsd, Sept. 30, 1949. Records available: 1946-51. May 21, 12.39. Measurement discontinued.

138-62-7cb. M. Ukestad. Dug stock well, diameter 30 inches, depth 37 feet. Highest water level 31.61 below lsd, July 19, 1950; lowest 33.88 below lsd, Sept. 4, 1946. Records available: 1946-51. May 21, 32.14. Measurement discontinued.

138-63-26ac. H. Beckman. Drilled domestic and stock well, diameter 24 inches, depth 72 feet. Highest water level 67.85 below lsd, Oct. 18, 1950; lowest 68.32 below lsd, Aug. 7, 1948. Records available: 1946-51. May 21, 68.06. Measurement discontinued.

138-64-12bb. A. Lambrecht. Drilled domestic and stock well, diameter 18 inches, depth 26 feet. Highest water level 0.34 below lsd, Oct. 13, 1947; lowest 1.65 below lsd, May 3, 1950. Records available: 1946-51. May 21, 1.10. Measurement discontinued.

139-63-4dd. E. Atteson. Dug domestic and stock well, diameter 4 feet, depth 28 feet. Highest water level 22.19 below lsd, May 3, 1950; lowest 26.12 below lsd, Aug. 30, 1946. Records available: 1946-51. May 21, 24.36. Measurement discontinued.

139-63-20ca. A. Meeker. Dug domestic and stock well, diameter 36 inches, depth 25 feet. Highest water level 14.73 below lsd, July 19, 1950; lowest 19.80 below lsd, Sept. 4, 1946. Records available: 1946-51. May 21, 16.14. Measurement discontinued.

139-63-20db. Elmer Mathias. Dug domestic and stock well, diameter 36 inches, depth 22 feet. Highest water level 12.94 below lsd, July 19, 1950; lowest 16.89 below lsd, Sept. 30, 1949. Records available: 1948-51. May 21, 14.70. Measurement discontinued.

139-64-5ab. Owner unknown. Drilled unused well, diameter  $2\frac{1}{4}$  inches. Highest water level 6.16 below lsd, Aug. 30, 1946; lowest 35.32 below lsd, May 9, 1947. Records available: 1946-51. May 21, 28.88. Measurement discontinued.

140-64-9da. A. Roeszler. Dug domestic well, diameter 36 inches, depth 15 feet. Highest water level 7.01 below lsd, May 3, 1950; lowest 11.00 below lsd, Aug. 27, 1946. Records available: 1946-51. May 21, 10.17. Measurement discontinued.

#### Towner County

158-66-20d1. S. L. Isaacson. Dug water-table well in glacial drift, diameter 4 feet, depth 30 feet. Highest water level 13.67 below lsd, June 19, 1951; lowest 24.74 below lsd, Nov. 3, 1951. Records available: 1942-44, 1947-51. June 19, 13.67; Nov. 3, 24.74.

160-66-28ba1. Bank of North Dakota. Drilled unused water-table well in glacial drift, diameter 4 inches, depth 135 feet. Highest water level 13.84 below lsd, Aug. 20, 1949; lowest 17.15 below lsd, Dec. 26, 1942. Records available: 1937-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	14.11	Feb. 24	14.03	Apr. 14	13.90	June 2	13.96
13	14.09	Mar. 3	14.01	21	13.88	9	13.96
20	14.09	10	13.99	28	13.88	16	13.98
27	14.08	17	13.97	May 5	13.88	23	13.98
Feb. 3	14.08	24	13.94	12	13.90	30	13.99
10	14.08	31	13.92	19	13.92	July 7	14.01
17	14.05	Apr. 7	13.90	26	13.94	14	14.03

160-66-28ba1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 21	14.05	Sept. 8	14.06	Oct. 20	13.97	Dec. 1	14.03
Aug. 4	14.07	15	14.03	27	13.99	8	14.06
11	14.09	22	14.01	Nov. 3	13.99	15	14.05
18	14.09	29	13.98	10	14.01	22	14.07
28	14.07	Oct. 6	13.98	17	14.01	29	14.07
Sept. 1	14.07	13	13.97	24	14.03		

Traill County

148-53-18a1. City of Hatton. Dug water-table well in glacial drift, diameter 6 feet, depth 31 feet. Highest water level 4.22 below lsd, June 3, 1950; lowest 27.17 below lsd, Sept. 29, 1940. Records available: 1937-51.

Apr. 7	7.70	June 3	7.96	July 28	9.54	Sept. 8	9.02
14	7.54	9	8.00	Aug. 10	9.74	15	7.68
22	7.86	July 7	8.76	18	9.87	22	9.20
28	6.90	14	9.06	25	10.00	Oct. 6	9.44
May 6	7.14	21	9.45	Sept. 1	9.17	20	8.32
13	7.68						

148-53-18ab1. City of Hatton. Dug water-table well in glacial drift, diameter 6 feet, depth 38 feet. Highest water level 3.33 below lsd, June 3, 1950; lowest 25.63 below lsd, Sept. 14, 1940. Records available: 1938-51.

Apr. 7	8.48	June 3	8.43	July 28	9.69	Sept. 8	9.77
14	8.34	9	8.43	Aug. 10	9.81	15	9.10
21	8.35	July 7	8.99	18	9.90	22	9.35
29	8.09	14	9.29	25	9.87	Oct. 6	9.59
May 6	8.19	21	9.59	Sept. 1	9.90	20	9.37
13	8.19						

148-53-18ad3. City of Hatton. Dug used water-table well in glacial drift, diameter 6 feet, depth 45 feet. Highest water level 3.24 below lsd, June 25, 1950; lowest 34.40 below lsd, Sept. 2, 1939. Records available: 1938-51.

Apr. 7	7.81	June 3	8.13	July 28	7.30	Sept. 8	8.32
14	7.96	9	8.20	Aug. 10	9.86	15	9.92
22	7.83	July 7	6.34	18	9.97	22	8.63
28	8.49	14	6.67	25	10.10	Oct. 6	8.97
May 6	8.43	21	6.93	Sept. 1	8.75	20	10.62
13	7.96						

Walsh County

157-51-16dc2. Henry Dipple. Dug water-table well in glacial Lake Agassiz deposits, diameter 4 feet, depth 16 feet. Highest water level 0.12 below lsd, Apr. 12, 1941; lowest 12.09 below lsd, Mar. 11, 1939. Records available: 1937-51. Nov. 16, 9.77.

157-55-17cc1. C. D. Lewis. Dug unused water-table well in glacial Lake Agassiz deposits, diameter 36 inches, depth 9 feet. Highest water level 1.37 below lsd, Apr. 24, 1948; lowest dry, Sept. 10, 1938. Records available: 1939-51. Nov. 17, 5.09.

157-55-17cd1. C. D. Lewis. Driven unused water-table well in glacial Lake Agassiz deposits, diameter 1½ inches, depth 15 feet. Highest water level 1.38 below lsd, June 12, 1943; lowest 10.47 below lsd, Nov. 11, 1938. Records available: 1938-51. Nov. 17, 6.27.

Ward County

154-81-27dd. A. M. Foss. Dug domestic well, diameter 4 feet, depth 29 feet. Highest water level 11.75 below lsd, July 27, 1950; lowest 20.35 below lsd, Oct. 17, 1945. Records available: 1945-51. May 3, 15.08; Aug. 31, 13.60. Measurement discontinued.

154-82-13ad. Owner unknown. Dug unused well, diameter 4 feet, depth 29 feet. Highest water level 18.45 below lsd, May 16, 1950; lowest 20.61 below lsd, July 11, 1946. Records available: 1945-51. May 3, 18.98. Measurement discontinued.

155-82-14dd. John Balerud. Drilled unused well, diameter 4 inches, depth 120 feet. Highest water level 37.32 below lsd, Oct. 26, 1950; lowest 39.20 below lsd, Oct. 17, 1945. Records available: 1945-51. May 4, 37.53; Aug. 28, 39.08. Measurement discontinued.

155-83-23baa1. City of Minot. Drilled unused artesian well in glacial drift, diameter 12 inches, depth 132 feet. Highest water level 39.40 below lsd, June 9, 1945; lowest 55.54 below lsd, July 25, 1951. Records available: 1944-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	48.29	49.67	48.20	50.48	50.36	51.90	51.64	54.44	49.36	51.41	51.55	.....
2	48.01	48.25	49.46	.....	50.58	48.46	51.68	53.73	48.33	51.80	44.76	.....
3	50.03	.....	49.54	50.46	50.02	51.82	52.33	54.68	48.25	50.48	51.63	.....
4	48.32	.....	49.49	51.17	50.03	51.86	51.88	54.15	48.23	51.76	51.53	.....
5	49.76	.....	48.18	50.52	50.68	51.78	52.03	49.76	48.30	44.93	51.08	.....
6	49.74	.....	49.32	50.48	49.98	52.78	52.78	52.35	51.53	51.88	51.53	.....
7	49.75	.....	.....	51.35	50.41	50.19	52.53	52.35	51.72	51.80	51.96	.....
8	49.03	.....	48.37	49.20	50.38	51.80	51.58	52.45	48.39	51.55	51.40	.....
9	49.33	.....	49.50	49.13	50.53	51.86	51.33	52.43	48.36	52.24	52.31	.....
10	50.15	.....	49.90	50.48	50.75	51.45	52.13	48.95	51.53	44.26	51.83	.....
11	48.36	.....	49.83	50.02	50.26	51.63	51.65	48.82	51.73	51.18	44.16	.....
12	49.68	.....	48.38	50.17	50.87	52.35	51.88	48.81	49.41	51.60	51.30	.....
13	49.58	.....	49.73	.....	49.98	51.66	52.85	51.61	51.41	49.13	51.44	.....
14	49.43	.....	50.16	50.18	49.83	51.46	52.83	52.03	51.71	51.64	44.06	.....
15	48.20	.....	49.68	50.45	50.18	51.45	52.28	48.75	51.31	51.60	44.73	.....
16	49.10	.....	49.24	.....	50.37	52.26	52.81	51.88	51.48	45.12	51.23	.....
17	49.91	.....	49.12	50.38	50.48	51.63	52.29	52.70	48.33	51.88	51.60	.....
18	48.25	.....	.....	50.46	50.42	51.70	52.24	52.23	44.83	51.88	50.38	.....
19	48.28	.....	49.41	49.13	51.08	51.68	52.18	48.82	51.78	51.68	51.30	.....
20	49.68	.....	48.16	50.23	51.03	51.75	52.08	48.60	52.22	50.98	.....	.....
21	49.48	.....	49.35	50.38	50.28	48.30	52.33	48.68	45.28	51.53	.....	.....
22	49.26	.....	49.45	50.03	51.03	48.75	52.31	48.50	50.88	51.18	.....	.....
23	50.00	.....	50.49	48.98	51.29	51.25	52.45	51.08	51.68	51.53	.....	.....
24	49.63	.....	50.58	50.73	54.38	51.28	53.35	51.85	51.03	51.51	.....	.....
25	48.38	49.24	50.55	50.38	52.33	51.33	55.54	51.93	51.52	51.25	.....	.....
26	49.56	48.00	49.09	49.11	52.28	51.32	53.63	51.64	51.78	51.68	.....	.....
27	50.24	49.23	50.28	50.08	52.32	51.55	53.68	48.43	51.86	51.35	.....	.....
28	49.45	49.28	.....	50.09	53.05	51.44	53.75	48.45	44.98	51.54	.....	.....
29	48.22	.....	50.65	50.48	52.20	51.67	54.08	48.40	52.20	51.14	.....	.....
30	49.28	.....	.....	.....	52.23	52.25	53.65	51.38	51.43	51.58	.....	.....
31	50.23	.....	.....	.....	52.10	53.88	51.71	.....	51.04	.....	.....	.....

156-81-4aa. Abel Beaton. Drilled domestic well, diameter 1½ inches, depth 185 feet. Highest water level 0.14 above lsd, July 9, 1947; lowest 7.76 below lsd, Sept. 13, 1949. Records available: 1945-51. May 4, 1.87. Measurement discontinued.

156-82-10bc1. Roy Tripp. Drilled domestic and stock well, diameter 24 inches, depth 35 feet. Highest water level 2.69 below lsd, May 4, 1949; lowest 22.25 below lsd, Oct. 15, 1945. Records available: 1945-51. May 4, 6.44; Aug. 26, 6.74. Measurement discontinued.

156-83-19bc1. D. Olson. Drilled unused well, diameter 30 inches, depth 33 feet. Highest water level 4.77 below lsd, May 4, 1951; lowest 12.85 below lsd, Nov. 9, 1948. Records available: 1945-51. May 4, 4.77; Sept. 4, 9.43. Measurement discontinued.

156-84-3bb. Owner unknown. Dug stock well, diameter 36 inches, depth 42 feet. Highest water level 11.48 below lsd, May 4, 1951; lowest 35.80 below lsd, July 15, 1946. Records available: 1945-51. May 4, 11.48; Aug. 26, 14.78. Measurement discontinued.

157-82-22dd. Owner unknown. Drilled unused well, diameter 4 feet. Highest water level 3.64 below lsd, May 3, 1949; lowest 14.04 below lsd, Nov. 13, 1947. Records available: 1945-51. May 16, 4.01; Aug. 29, 9.98. Measurement discontinued.

157-83-7dd2. H. A. Kluver. Dug stock well, diameter 20 inches, depth 29 feet. Highest water level 7.85 below lsd, July 24, 1950; lowest 19.80 below lsd, Oct. 12, 1945. Records available: 1945-51. May 16, 10.85; Aug. 26, 9.54. Measurement discontinued.

157-84-20cc. Public School. Dug unused well, depth 30 feet. Highest water level 12.12 below lsd, July 10, 1950; lowest 24.00 below lsd, Oct. 13, 1945. Records available: 1945-51. May 16, 13.24; Aug. 16, 13.64. Measurement discontinued.

157-84-22ad. A. M. Bock. Dug domestic and stock well, depth 23 feet. Highest water level 0.80 below lsd, May 8, 1950; lowest 10.70 below lsd, Sept. 26, 1949. Records available: 1945-51. May 16, 5.05; Aug. 26, 8.90. Measurement discontinued.

159-87-1dc1. C. Sorenson. Dug domestic well, diameter 36 inches, depth 24 feet. Highest water level 4.66 below lsd, May 15, 1951; lowest 13.07 below lsd, Apr. 16, 1947. Records available: 1945-51. May 15, 4.66; Aug. 16, 9.26. Measurement discontinued.

160-87-13cd. Roy Cole. Dug domestic well, diameter 36 inches, depth 30 feet. Highest water level 2.66 below lsd, May 15, 1951; lowest 10.33 below lsd, Oct. 23, 1946. Records available: 1945-51. May 15, 2.66; Aug. 16, 7.45. Measurement discontinued.

160-88-4dc. Levi Emmel. Drilled unused well, diameter 18 inches. Highest water level 2.82 below lsd, May 11, 1950; lowest 9.38 below lsd, Sept. 23, 1949. Records available: 1945-51. May 15, 4.27; Aug. 16, 7.22. Measurement discontinued.

161-88-28aa. State Highway Department. Drilled domestic well, diameter 18 inches. Highest water level 0.28 below lsd, May 10, 1948; lowest 7.12 below lsd, Oct. 4, 1946. Records available: 1945-51. May 9, 0.45; Aug. 15, 5.67. Measurement discontinued.

#### Wells County

150-72-21cd1. City of Harvey. Drilled water-table well in glacial drift, diameter 26 inches, depth 40 feet. Highest water level 3.21 above lsd, Sept. 26, 1946; lowest 15.48 below lsd, Mar. 18, 1937. Records available: 1937-50. No measurement made in 1951.

150-72-28ba1. City of Harvey. Drilled water-table well in glacial drift, diameter 26 inches, depth 40 feet. Highest water level 0.44 below lsd, July 16, 1951; lowest 20.17 below lsd, Aug. 31, 1944. Records available: 1937-48, 1950-51. July 16, 0.44; Nov. 4, 5.84.

#### Williams County

159-103-24da1. Hans O. Lottestad. Dug water-table well in glacial drift, diameter 18 inches, depth 43 feet. Highest water level 8.74 below lsd, Apr. 19, 1947; lowest 39.66 below lsd, Mar. 15, 1941. Records available: 1939-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	24.15	Apr. 8	15.92	July 8	14.01	Oct. 7	19.28
14	24.39	15	11.14	15	14.56	14	19.56
21	24.57	22	10.12	22	15.31	24	19.73
28	24.75	29	9.33	29	15.67	28	20.01
Feb. 4	24.89	May 6	8.88	Aug. 7	13.84	Nov. 4	20.24
11	25.04	13	9.65	15	9.56	11	20.35
18	25.19	20	10.01	22	15.31	18	20.70
25	25.31	27	10.42	29	15.66	25	20.82
Mar. 4	25.35	June 3	11.29	Sept. 2	17.75	Dec. 2	21.05
11	25.44	10	11.67	9	18.20	9	21.22
18	25.60	17	12.17	16	18.57	16	21.40
25	25.75	24	12.69	23	18.76	23	21.66
Apr. 1	21.99	July 1	13.41	30	18.95	30	21.85

159-103-24da2. Hans O. Lottestad. Dug water-table well probably in glacial drift, size 24 by 24 inches, depth 36 feet. Highest water level 5.65 below lsd, June 20, 1943; lowest 39.01 below lsd, Dec. 25, 1940. Records available: 1938-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	17.59	Apr. 8	13.56	July 8	9.55	Oct. 7	12.84
14	17.79	15	7.87	15	10.72	14	13.03
21	18.00	22	8.60	22	10.27	22	13.25
28	18.13	29	7.12	29	10.45	28	13.51
Feb. 4	18.29	May 6	6.31	Aug. 5	10.79	Nov. 4	13.69
11	18.44	13	6.67	12	11.11	11	14.38
18	18.56	20	7.78	19	11.40	18	14.40
25	18.65	27	7.85	26	11.81	25	14.56
Mar. 4	18.78	June 3	8.23	Sept. 2	11.94	Dec. 2	14.58
11	18.87	10	8.49	9	12.01	9	14.98
18	19.06	17	8.75	16	12.12	16	15.13
25	19.25	24	9.08	23	12.32	23	15.27
Apr. 1	17.61	July 1	9.31	30	12.51	30	15.47

## SOUTH DAKOTA

By Ronald S. Stulik

### Scope of Water-Level Program

The observation-well program, started in 1935, was continued through cooperation with the State Geological Survey until 1946. Since 1946, measurements of water levels have been continued as part of the Missouri River Basin program. Figures 19-21 show the areas in which investigations have been made. An investigation in the Oahe area was begun in 1947 in cooperation with the U. S. Bureau of Reclamation. At the end of 1951, 356 wells had been established by the U. S. Bureau of Reclamation. Monthly measurements of water levels were recorded and hydrographs were plotted. Aquifer performance tests were made to determine the permeability, transmissibility, and storage coefficient of the principal water-bearing sands in the central part of the area, and also to determine the permeability of the overlying glacial till. Measurements were made in 139 wells in the Sand Lake-Crow Creek area during 1951. Several contour maps, showing the depth-to-water at different times of the year, and a geologic map were prepared. Monthly water-level measurements were made in 109 wells in the Angostura area. A continuation of an investigation to determine if there is an excess of ground water which could be recovered and put to a beneficial use, was carried on in Rapid Valley during 1951.

### Precipitation

During 1951 the total amount of precipitation in the Sand Lake-Crow Creek area was about 16 inches, about 4 inches below normal. The total amount of precipitation recorded at the Angostura Dam station during 1951 was 16.63 inches. The total amount of precipitation in Rapid Valley was below the annual normal by about 1.5 inches. Aberdeen, at the northern end of the Oahe area, received 18.71 inches of precipitation during 1951. This figure was 5.27 inches below the average annual precipitation. Huron, in the east-central portion of the Oahe area, received 24.19 inches of precipitation, or 4.44 inches above the average annual precipitation of 19.75 inches. A normal 23.00 inches of precipitation was recorded at Mitchell in the extreme southern portion of the Oahe area.

### Interpretation of Water-Level Fluctuations

East of the Missouri River, ground water may be obtained from the aquifers deposited during substages of the Wisconsin glacial period. The ground water in most of the glacial aquifers is confined. There are a few flowing wells, but the usual range in depth-to-water is from about 10 to 50 feet and depths-to-water of about 100 feet are not uncommon. West of the Missouri River, ground water is obtained from alluvium or terrace deposits. The ground water may or may not be confined; local variations seem to predominate rather than there being regional or large-area variations. The following table is a brief summary of changes in ground-water level for 1951.

Summary of annual change in ground-water levels  
in South Dakota, 1950-51

Area (County)	Number of wells	Change from spring 1950 to spring 1951 (feet)	Change from fall of 1950 to fall 1951 (feet)
James River (Beadle, Brown, Edmunds, Faulk, Hand, Jerauld, Marshall, Spink, Sanborn)	24	+0.40	+0.84
Big Sioux River (Codington, Minnehaha)	2	+1.39	.69
General Eastern (Walworth)	1	-.68	-1.70
Rapid Valley (Pennington)	2	-2.16	-1.02

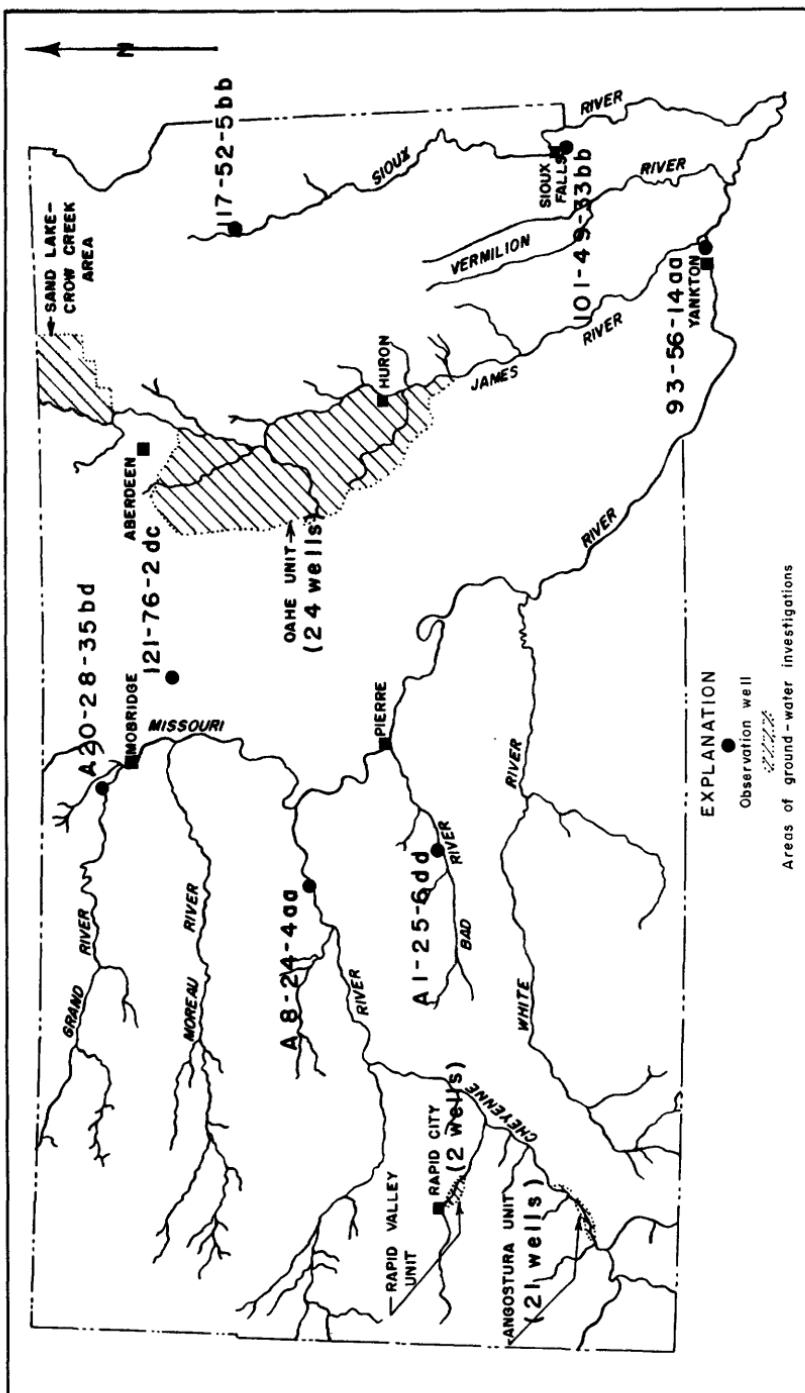


Figure 19.--Location of observation wells in South Dakota, 1951.

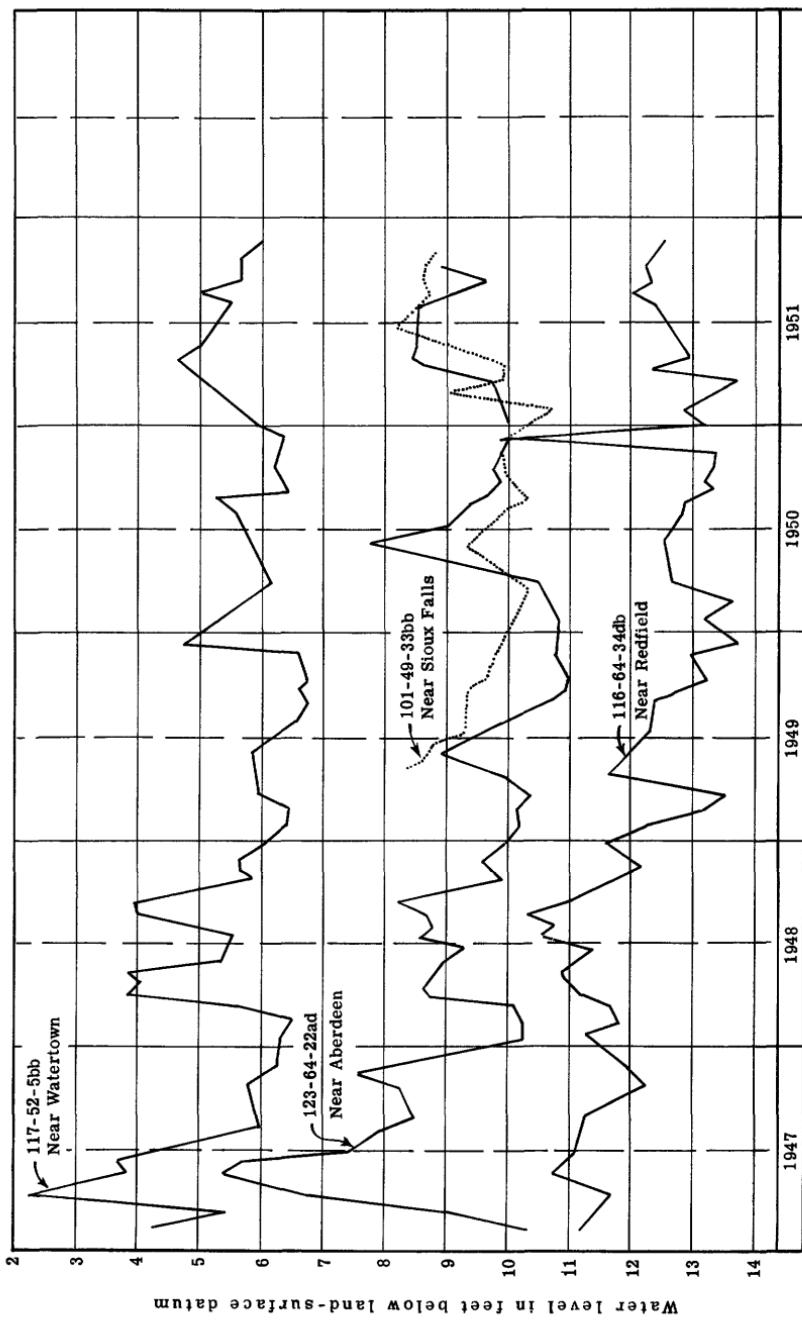


Figure 20.--Water levels in selected wells in eastern South Dakota, 1951.

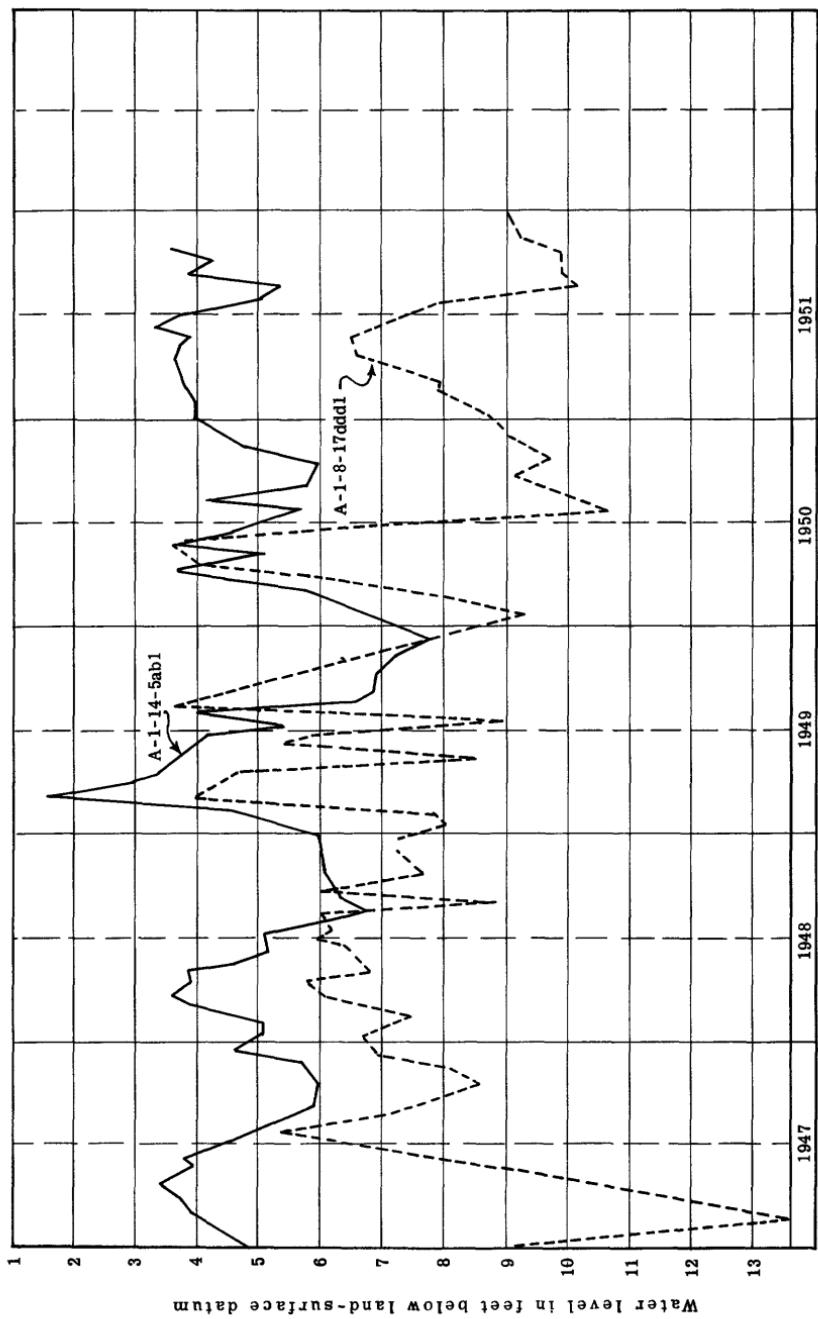


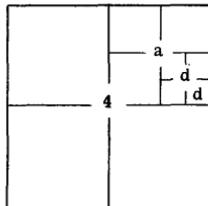
Figure 21.--Water levels in selected wells in the Rapid Valley area, South Dakota, 1951.

Summary of annual change in ground-water levels  
in South Dakota, 1950-51--Continued

Area (County)	Number of wells	Change from spring 1950 to spring 1951 (feet)	Change from fall of 1950 to fall 1951 (feet)
Angostura (Custer, Fall River)	21	-0.25	-0.31
General Western (Corson, Haakon)	3	-1.18	-.39
Missouri Trench (Yankton)	1	+3.75	+5.63
Average		.+04	.+29

Well-Numbering System

Wells are numbered in accordance with the Bureau of Land Management system of land subdivision. The first numeral of a well number indicates the township, the second the range, and the third the section in which the well is situated. The lowercase letters, a, b, c, and d, following the section number indicate the well location within the section: the first letter denotes the quarter section (160-acre tract), the second the quarter-quarter section (40-acre tract), and the third the quarter-quarter-quarter section (10-acre tract). The letters are assigned in a counterclockwise direction, beginning in the northeast quarter. If the location is known within a 10-acre tract, three lowercase letters are shown in the well number. When there is more than one well in the smallest significant tract, consecutive numbers beginning with 1 are added as suffixes. Well numbers preceded by the capital letters A and D designate wells in the northeast and southeast quadrants, respectively, of the Black Hills meridian and base line system. Well numbers not preceded by a capital letter designate wells in the 5th or 6th principal meridian and base line systems. Below is a graphical illustration of this method of well numbering within a section of 640 acres.



Well Descriptions and Water-Level Measurements

(Water levels are in feet below land-surface datum unless otherwise indicated.)

Beadle County

112-61-34cccc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 1,298.72 feet above msl. Highest water level 6.83 below lsd, July 30, 1951; lowest 20.29 below lsd, July 23, 1948. Records available: 1948-51. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	9.05	Apr. 25	8.89	June 28	8.00	Aug. 29	7.30
Feb. 20	9.12	May 12	8.78	July 30	6.83	Nov. 5	7.10
Mar. 27	8.48						

112-62-31cccc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 1,307.30 feet above msl. Highest water level 10.31 below lsd, Nov. 5, 1951; lowest 18.30 below lsd, July 23, 1948. Records available: 1948-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	12.20	Apr. 25	12.02	June 28	11.08	Aug. 30	10.50
Feb. 20	12.23	May 23	11.81	July 25	10.90	Nov. 5	10.31
Mar. 27	12.27						

112-62-34cccc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 1,291.8 feet above msl. Highest water level 4.25 below lsd, Oct. 26, 1950; lowest 11.43 below lsd, Nov. 8, 1948. Records available: 1948-51. May 12, 10.48; June 28, 11.23; July 25, 9.08; Aug. 30, 8.64; Nov. 5, 8.55.

112-63-31cccc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 1,340.4 feet above msl. Highest water level 0.40 below lsd, June 28, 1951; lowest 20.97 below lsd, July 23, 1948. Records available: 1948-51.

Date	Water level						
Jan. 30	8.62	Apr. 25	9.08	June 28	0.40	Aug. 30	6.73
Feb. 20	8.86	May 23	8.62	July 25	7.15	Nov. 5	6.30
Mar. 27	8.82						

112-63-34cccc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $\frac{1}{4}$  inches, depth 25 feet. Land-surface datum is 1,320.6 feet above msl. Highest water level 8.50 below lsd, Nov. 5, 1951; lowest dry July 23, Aug. 7, 1948. Records available: 1948-51.

Jan. 30	12.11	Apr. 25	12.01	June 28	7.70	Aug. 30	11.12
Feb. 20	12.12	May 23	11.91	July 25	11.25	Nov. 5	8.50
Mar. 27	12.25						

112-64-34cccc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 1,325.8 feet above msl. Highest water level 1.14 below lsd, May 11, 1950; lowest 7.20 below lsd, Aug. 18, 1949. Records available: 1948-51.

Jan. 30	5.09	Apr. 25	1.66	June 28	1.65	Aug. 30	2.93
Feb. 20	5.49	May 22	1.68	July 25	2.04	Nov. 5	3.00
Mar. 26	3.49						

113-60-31cccc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $\frac{1}{4}$  inches, depth 21 feet. Land-surface datum is 1,302.75 feet above msl. Highest water level 3.79 below lsd, May 11, 1950; lowest 9.60 below lsd, Jan. 18, 1950. Records available: 1949-51.

Jan. 31	7.86	Apr. 24	6.20	July 24	4.48	Oct. 23	5.90
Feb. 21	8.27	May 21	5.94	Aug. 21	4.22	Nov. 26	6.41
Mar. 22	8.40	June 22	3.91	Sept. 18	5.42		

113-63-34cccc2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter 1 inch, depth 40 feet. Land-surface datum is 1,301.6 feet above msl. Highest water level 1.13 below lsd, May 11, 1950; lowest 4.96 below lsd, Aug. 24, 1950. Records available: 1950-51.

Feb. 21	4.18	May 21	1.45	Aug. 24	2.88	Oct. 26	2.40
Mar. 22	3.03	June 22	2.23	Sept. 26	3.66	Nov. 26	2.75
Apr. 24	1.38	July 24	2.47				

113-64-31cccc2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $\frac{1}{4}$  inches, depth 44 feet. Land-surface datum is 1,332.0 feet above msl. Highest water level 0.35 below lsd, May 23, 1951; lowest 3.30 below lsd, Feb. 21, 1951. Records available: 1950-51.

Jan. 31	3.15	May 23	0.35	Aug. 22	1.63	Oct. 26	0.80
Feb. 21	3.30	July 24	1.37	Sept. 24	2.31	Nov. 26	1.45
Apr. 25	1.23						

113-64-31cccc3. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $\frac{1}{4}$  inches, depth 18 feet. Land-surface datum is 1,332.0 feet above msl. Highest water level 0.22 below lsd, May 23, 1951; lowest 3.70 below lsd, Sept. 17, 1950. Records available: 1950-51.

Jan. 30	3.22	May 23	0.22	Aug. 22	1.74	Oct. 26	1.00
Feb. 21	3.29	July 24	1.46	Sept. 24	2.39	Nov. 26	1.51
Apr. 25	1.28						

113-64-34cccc2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter 1 inch, depth 40 feet. Land-surface datum is 1,345.5 feet above msl. Highest water level 2.84 below lsd, June 26, 1951; lowest 8.00 below lsd, Sept. 17, 1950. Records available: 1950-51.

## 113-64-34cccc2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	7.25	May 23	3.04	Aug. 22	4.63	Oct. 29	5.95
Feb. 21	7.77	June 26	2.84	Sept. 24	5.93	Nov. 26	6.13
Apr. 25	3.08	July 24	3.20				

113-65-34cccc2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter 1 inch, depth 40 feet. Land-surface datum is 1,380.4 feet above msl. Highest water level 8.23 below lsd, June 25, 1951; lowest 13.41 below lsd, Feb. 21, 1951. Records available: 1950-51.

Jan. 30	12.92	Apr. 25	12.01	July 24	8.73	Oct. 29	11.00
Feb. 21	13.41	May 23	9.01	Aug. 22	9.70	Nov. 26	11.65
Mar. 26	13.40	June 25	8.23	Sept. 24	11.32		

Brown County

121-64-33dddd. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 1,294.5 feet above msl. Highest water level 6.90 below lsd, June 2, 1949; lowest 20.90 below lsd, Oct. 28, Dec. 2, 1948. Records available: 1948-51.

Jan. 29	17.12	Apr. 28	14.62	June 30	12.45	Aug. 24	13.76
Feb. 21	17.42	May 18	13.56	July 28	12.61	Oct. 31	
Mar. 30	17.25						

123-64-22ad. G. Reitz. Dug unused well in glacial drift, diameter 5 feet, depth 15 feet. Highest water level 7.31 below lsd, May 22, 1950; lowest 10.97 below lsd, Oct. 6, 1949. Records available: 1946-51.

Jan. 3	9.99	Apr. 17	8.65	Aug. 1	8.51	Oct. 5	8.91
Mar. 18	9.71	27	8.47	21	9.14	25	9.58
Apr. 5	8.94	May 18	8.39	Sept. 11	9.61	Nov. 27	9.98

124-61-19ab. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{3}{4}$  inch, depth 15 feet. Land-surface datum is 1,272.76 feet above msl. Highest water level 4.96 below lsd, June 25, 1951; lowest 7.25 below lsd, Sept. 11, 1951. Records available: 1950-51. Measurement discontinued.

Feb. 6	g6.80	June 4	5.08	July 16	5.87	Aug. 13	6.95
Apr. 9	g6.15	25	4.96	31	6.42	Sept. 11	7.25
27	6.22						

g By U. S. Fish and Wildlife Service.

126-61-6aa. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{3}{4}$  inch, depth 17 feet. Land-surface datum is 1,296.21 feet above msl. Highest water level 5.17 below lsd, July 16, 1951; lowest 7.98 below lsd, Sept. 2, 1950. Records available: 1950-51.

Feb. 6	g8.90	June 7	5.79	July 16	5.17	Sept. 10	7.10
Apr. 9	g6.45	13	5.80	31	5.83	Oct. 9	7.41
26	6.18	25	6.05	Aug. 13	6.51	Nov. 28	7.14
June 2	5.93	July 2	5.77				

g By U. S. Fish and Wildlife Service.

126-62-3bb. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{3}{4}$  inch, depth 14 feet. Land-surface datum is 1,302.94 feet above msl. Highest water level 4.05 below lsd, Apr. 10, 1951; lowest 13.20 below lsd, Dec. 28, 1950. Records available: 1950-51.

Feb. 6	g14.6	June 2	5.13	July 2	5.70	Sept. 11	6.84
Apr. 10	g4.05	7	4.75	16	4.62	Oct. 9	10.30
26	5.19	25	4.87	31	5.63	Nov. 28	10.34

g By U. S. Fish and Wildlife Service.

126-62-34ab. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{3}{4}$  inch, depth 16 feet. Land-surface datum is 1,290.48 feet above msl. Highest water level 2.51 below lsd, June 2, 1951; lowest 5.90 below lsd, Feb. 2, 1951. Records available: 1950-51.

Feb. 2	g5.90	June 25	3.31	July 31	4.11	Nov. 1	5.10
Apr. 27	2.72	July 2	3.77	Sept. 11	4.30	29	
June 2	2.51	16	3.65	Oct. 12	5.50		

g By U. S. Fish and Wildlife Service.

127-61-19dd. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{3}{4}$  inch, depth 15 feet. Land-surface datum is 1,290.17 feet above msl. Highest water level 0.80 below lsd, June 1, 1951; lowest 5.25 below lsd, Sept. 20, 1950. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 27	1.90	June 12	1.41	July 16	1.66	Sept. 11	4.06
June 1	.80	25	1.42	31	3.56	Oct. 9	4.20
7	4.67	July 2	2.43	Aug. 14	3.80		

128-61-26bbb. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{1}{2}$  inch, depth 25 feet. Land-surface datum is 1,296.91 feet above msl. Highest water level 9.19 below lsd, July 17, 1951; lowest 12.72 below lsd, Sept. 20, 1950. Records available: 1950-51.

Feb. 6	g12.50	June 6	10.33	July 17	9.19	Sept. 13	10.40
Apr. 10	g10.78	25	9.93	Aug. 1	9.62	Oct. 9	10.64
27	10.82	July 2	10.01	14	10.35	Nov. 30	10.40

g By U. S. Fish and Wildlife Service.

#### Charles Mix County

96-65-4dd. Amundsen. Drilled unused well, diameter 18 inches. Highest water level 1.76 below lsd, Apr. 16, 1951; lowest 14.27 below lsd, Oct. 5, 1948. Records available: 1946-51. Apr. 16, 1.76. Measurement discontinued.

#### Codington County

117-52-5bb. Desmond. Dug unused well in glacial drift, diameter 36 inches, depth 12 feet. Highest water level 2.25 below lsd, Apr. 10, 1947; lowest 6.77 below lsd, Oct. 5, 1949. Records available: 1946-51.

Jan. 3	5.91	May 16	4.97	Aug. 22	5.01	Oct. 24	5.66
Apr. 14	4.80	Aug. 1	5.51	Sept. 10	5.69	Nov. 28	6.07
23	4.65						

#### Corson County

A-20-28-35bd. J. Corken. Dug domestic well, diameter 36 inches, depth 19 feet. Highest water level 10.65 below lsd, July 2, 1950; lowest dry Sept. -Oct., 1947, Sept. -Nov., 1948, July-Oct., 1949. Records available: 1946-51.

Jan. 16	12.95	May 24	13.00	Aug. 1	12.59	Sept. 11	12.27
Feb. 14	12.50	July 11	12.33	21	13.75	Oct. 2	12.60
Apr. 23	13.22						

#### Custer County

D-6-8-13aad. W. Sneider. Dug unused well in alluvial sand and gravel of Quaternary age, diameter 5 feet, depth 18 feet. Land-surface datum is 2,961.72 feet above msl. Highest water level 13.85 below lsd, Aug. 9, 1946; lowest 16.27 below lsd, Jan. 31, 1947. Records available: 1946-51. Feb. 15, 15.96; June 9, 16.20; Aug. 31, 15.69; Dec. 3, 15.84.

D-6-8-24ddc. E. Mohler. Dug domestic and stock well in terrace sand and gravel of Quaternary age, diameter 4 feet, depth 41 feet. Land-surface datum is 2,995.55 feet above msl. Highest water level 37.07 below lsd, Mar. 3, Apr. 29, 1948; lowest 38.00 below lsd, July 2, 1948. Records available: 1946-51. Aug. 31, 37.54; Dec. 3, 37.45.

D-6-8-25dab. H. W. Mohler. Dug domestic and stock well in terrace sand and gravel of Quaternary age, diameter 4 feet. Land-surface datum is 2,993.24 feet above msl. Highest water level 32.12 below lsd, July 2, 1947; lowest 33.31 below lsd, Oct. 29, 1946. Records available: 1946-50. Measurement discontinued.

D-6-8-26aac. Owner unknown. Dug unused well, diameter 4 feet, depth 38 feet. Land-surface datum is 3,040.99 feet above msl. Highest water level 31.41 below lsd, July 2, 1947; lowest 37.48 below lsd, Sept. 5, 1946. Records available: 1946-51. Feb. 15, 35.44; Aug. 31, 36.04; Dec. 3, 35.71.

D-6-9-8ccb. U. S. Government. Dug unused well in terrace sand and gravel of Quaternary age, diameter 5 feet, depth 39 feet. Land-surface datum is 2,973.78 feet above msl. Highest water level 35.07 below lsd, Dec. 8, 1948; lowest 35.90 below lsd, July 2, 1948. Records available: 1946-51. Feb. 15, 35.35; June 9, 35.29; Aug. 31, 35.46; Dec. 3, 35.43.

D-6-9-8dcc2. U. S. Government. Dug unused well in terrace sand and gravel of Quaternary age, diameter 4 feet, depth 21 feet. Land-surface datum is 2,965.25 feet above msl. Highest water level 16.33 below lsd, Dec. 10, 1947; lowest 17.95 below lsd, June 5, 1947. Records available: 1946-51. Feb. 15, 17.15; June 9, 17.39; Aug. 31, 17.40; Dec. 3, 17.46.

D-6-9-18acc2. U. S. Government. Dug unused well in alluvial sand and gravel of Quaternary age, diameter 5 feet. Land-surface datum is 2,952.01 feet above msl. Highest water level 5.88 below lsd, July 2, 1947; lowest 8.60 below lsd, July 2, 1948. Records available: 1946-51. Feb. 15, 8.03; Aug. 31, 8.20; Dec. 3, 8.05.

D-6-9-18dcc2. L. J. Berfiend. Dug domestic and stock well in terrace sand and gravel of Quaternary age, diameter 4 feet, depth 37 feet. Land-surface datum is 2,984.03 feet above msl. Highest water level 31.48 below lsd, Dec. 29, 1949; lowest 32.61 below lsd, May 1, 1947. Records available: 1946-51. Feb. 15, 31.90; June 9, 31.92; Aug. 31, 32.10; Dec. 3, 32.08.

D-6-9-19bda. U. S. Government. Dug domestic well in terrace sand and gravel of Quaternary age, diameter 4 feet, depth 32 feet. Highest water level 30.70 below lsd, Nov. 28, 1949; lowest 34.70 below lsd, May 1, 1947. Records available: 1946-51. Feb. 15, 31.85; June 9, 31.91; Aug. 30, 32.13.

D-6-9-20bcd. U. S. Government. Dug unused well in terrace sand and gravel of Quaternary age, diameter 42 inches, depth 12 feet. Land-surface datum is 2,976.5 feet above msl. Highest water level 9.14 below lsd, Aug. 5, 1947; lowest 10.87 below lsd, May 1, 1947. Records available: 1946-51. Feb. 15, 10.32; June 9, 10.16; Aug. 31, 10.39; Dec. 3, 10.46.

#### Edmunds County

121-66-10cb. G. Price. Dug stock well in glacial drift, diameter 36 inches, depth 11 feet. Highest water level 5.41 below lsd, June 5, 1950; lowest 7.40 below lsd, Sept. 30, 1949. Records available: 1946-51. Apr. 17, 6.52; Nov. 2, 7.07. Measurement discontinued.

#### Fall River County

D-7-7-25ccc. U. S. Government. Dug unused well in alluvial sand and gravel of Quaternary age, diameter 4 feet, depth 13 feet. Land-surface datum is 3,067 feet above msl. Highest water level 10.28 below lsd, May 25, 1950; lowest 11.63 below lsd, Apr. 18, 1946. Records available: 1946-51. Feb. 15, 10.47; June 9, 10.61; Aug. 30, 10.88; Dec. 3, 11.02.

D-7-7-27bab. C. Fleming. Dug unused well in alluvial sand and gravel of Quaternary age, diameter 4 feet, depth 22 feet. Land-surface datum is 2,954.8 feet above msl. Highest water level 17.79 below lsd, May 25, 1950; lowest 19.40 below lsd, July 2, 1948. Records available: 1946-51. Feb. 15, 18.54; June 9, 18.26; Aug. 30, 18.80; Dec. 3, 18.61.

D-7-7-35baa. A. W. Gamet. Dug stock well in terrace sand and gravel of Quaternary age, diameter 36 inches, depth 32 feet. Land-surface datum is 3,083.9 feet above msl. Highest water level 27.13 below lsd, Nov. 28, 1949; lowest 29.00 below lsd, July 2, 1948. Records available: 1946-51. Feb. 15, 27.45; June 9, 27.51; Aug. 30, 27.82; Dec. 3, 27.75.

D-7-8-10cba. D. Moiser. Dug domestic well in alluvial sand and gravel of Quaternary age, diameter 36 inches, depth 16 feet. Land-surface datum is 2,886 feet above msl. Highest water level 12.45 below lsd, July 2, 1947; lowest 15.16 below lsd, Sept. 30, 1946. Records available: 1946-51. Feb. 15, 14.33; June 9, 14.18. Measurement discontinued.

D-7-8-11ccd. Worth Gamet. Dug domestic and stock well in terrace sand and gravel of Quaternary age, diameter 4 feet, depth 38 feet. Land-surface datum is 3,022 feet above msl. Highest water level 28.33 below lsd, Aug. 10, 1949; lowest 34.27 below lsd, Apr. 19, 1946. Records available: 1946-51. Feb. 15, 28.99; June 9, 28.97; Aug. 30, 29.36; Dec. 3, 29.10.

D-7-8-14cdd. Ward Gamet. Drilled unused well in eolian sand of Quaternary age, diameter 24 inches, depth 58 feet. Land-surface datum is 3,064 feet above msl. Highest water level 48.01 below lsd, July 2, 1949; lowest 49.90 below lsd, July 2, 1948. Records available: 1946-51. June 9, 48.41; Aug. 30, 48.71; Dec. 3, 48.66.

D-7-8-17cbc. P. Fleming. Dug domestic and stock well in terrace sand and gravel of Quaternary age, diameter 4 feet, depth 35 feet. Land-surface datum is 3,038 feet above msl. Highest water level 24.02 below lsd, July 1, 1947; lowest 29.04 below lsd, Apr. 19, 1946. Records available: 1946-51. Feb. 15, 25.21; June 9, 25.32; Aug. 30, 25.18; Dec. 3, 25.15. Measurement discontinued.

D-7-8-19cab. W. G. Tice. Dug unused well in terrace sand and gravel of Quaternary age, diameter 25 inches, depth 16 feet. Land-surface datum is 3,041.3 feet above msl. Highest water level 12.83 below lsd, July 1, 1947; lowest 14.47 below lsd, Dec. 3, 1951. Records available: 1946-51. Feb. 15, 13.82; June 9, 13.84; Aug. 30, 14.35; Dec. 3, 14.47.

D-7-8-20ddc. R. Gamet. Dug domestic and stock well in eolian sand of Quaternary age, diameter 4 feet, depth 72 feet. Land-surface datum is 3,103 feet above msl. Highest water level 69.99 below lsd, Aug. 10, 1949; lowest 72.00 below lsd, July 2, 1948. Records available: 1946-51. Feb. 15, 70.60; June 9, 70.71; Aug. 30, 71.03; Dec. 3, 70.86.

D-7-8-21ddc. J. Eng. Dug domestic and stock well in terrace sand and gravel of Quaternary age, diameter 4 feet, depth 88 feet. Land-surface datum is 3,098 feet above msl. Highest water level 60.98 below lsd, Aug. 10, 1949; lowest 62.90 below lsd, July 2, 1948. Records available: 1946-51. June 9, 72.06, pumped recently. Measurement discontinued.

D-7-8-29ccc. U. S. Government. Dug unused well, diameter 4 feet, depth 73 feet. Land-surface datum is 3,118 feet above msl. Highest water level 71.74 below lsd, Feb. 20, 1948; lowest 73.00 below lsd, July 2, 1948. Records available: 1946-51. Feb. 15, 72.03; June 9, 72.16; Aug. 30, 72.16; Dec. 3, 72.09.

D-7-8-33bbb. A. J. Segar. Dug unused well, diameter 4 feet. Land-surface datum is 3,156.74 feet above msl. Highest water level 16.52 below lsd, Sept. 26, 1949; lowest 23.45 below lsd, June 5, 1946. Records available: 1946-51. Feb. 15, 17.62; June 9, 18.35; Aug. 30, 18.15; Dec. 3, 18.23.

D-8-6-1bad. U. S. Government. Dug unused well in alluvial sand and gravel of Quaternary age, diameter 5 feet, depth 26 feet. Land-surface datum is 3,041 feet above msl. Highest water level 22.21 below lsd, Feb. 15, 1951; lowest 23.50 below lsd, July 2, 1948. Records available: 1946-51. Feb. 15, 22.21; June 9, 22.44. Measurement discontinued.

D-8-6-10ada. U. S. Government. Dug unused well in terrace sand and gravel of Quaternary age, diameter 4 feet, depth 42 feet. Land-surface datum is 3,135 feet above msl. Highest water level 38.37 below lsd, Aug. 10, 1949; lowest 41.94 below lsd, Oct. 20, 1950. Records available: 1946-51. Feb. 15, 39.22; June 9, 39.30; Aug. 30, 38.73; Dec. 3, 39.06.

D-8-6-13aac. A. J. Kieffer. Dug unused well in eolian sand of Quaternary age, diameter 24 inches, depth 12 feet. Land-surface datum is 3,207.96 feet above msl. Highest water level 7.01 below lsd, June 30, 1947; lowest dry, Aug. 30, Dec. 3, 1951. Records available: 1946-51. Feb. 15, 8.27; June 9, 8.01; Aug. 30, dry; Dec. 3, dry. Measurement discontinued.

D-8-6-13bad. A. J. Kieffer. Dug domestic well in eolian sand of Quaternary age, diameter 24 inches, depth 13 feet. Land-surface datum is 3,212.8 feet above msl. Highest water level 8.70 below lsd, Aug. 4, 1947; lowest 10.36 below lsd, Oct. 2, 1946. Records available: 1946-51. Feb. 15, 9.83; June 9, 9.82; Aug. 30, 10.27; Dec. 3, 10.11.

D-8-6-15bcd1. W. J. Beck. Drilled domestic and stock well, diameter 8 inches, depth 160 feet. Land-surface datum is 3,242.92 feet above msl. Highest water level 66.34 below lsd, Dec. 11, 1947; lowest 77.61 below lsd, Sept. 30, 1946. Records available: 1946-51. Feb. 15, 73.82; June 9, 73.11; Aug. 30, 76.45; Dec. 3, 76.44. Measurement discontinued.

D-8-6-16aba. Airport, Hot Springs. Drilled domestic well, diameter 6 inches, depth 120 feet. Land-surface datum is 3,148.5 feet above msl. Highest water level 38.21 below lsd, Apr. 28, 1950; lowest 40.70 below lsd, July 2, 1948. Records available: 1946-51. Aug. 30, 39.54. Measurement discontinued.

D-8-7-5acc. E. Hagerman. Dug unused well in terrace sand and gravel of Quaternary age, depth 49 feet. Land-surface datum is 3,116 feet above msl. Highest water level 42.64 below lsd, Apr. 28, 1950; lowest 45.62 below lsd, June 4, 1947. Records available: 1946-51. Feb. 15, 43.02; June 9, 42.96; Aug. 30, 43.63; Dec. 3, 43.37.

D-8-7-6ddc. A. Mills. Dug domestic and stock well in terrace sand and gravel of Quaternary age, diameter 4 feet, depth 37 feet. Land-surface datum is 3,128 feet above msl. Highest water level 32.81 below lsd, Apr. 28, 1950; lowest 35.60 below lsd, July 2, 1948. Records available: 1946-51. June 9, 32.96.

D-8-7-7bb2. H. Kneupel. Dug domestic and stock well in terrace sand and gravel of Quaternary age, diameter 4 feet. Land-surface datum is 3,110 feet above msl. Highest water level 2.83 below lsd, July 1, 1947; lowest 7.98 below lsd, Aug. 7, 1946. Records available: 1946-51. Feb. 15, 5.87; June 9, 6.05; Aug. 30, 6.74; Dec. 3, 6.56.

## 196 WATER LEVELS AND ARTESIAN PRESSURES, 1951, NORTH-CENTRAL STATES

D-8-7-8dcc. Hazel Reigler. Dug unused well in eolian sand of Quaternary age, diameter 36 inches, depth 21 feet. Land-surface datum is 3, 232.01 feet above msl. Highest water level 14.89 below lsd, Dec. 29, 1949; lowest 17.51 below lsd, June 5, 1946. Records available: 1946-51. Feb. 15, 16.46; June 9, 16.57; Aug. 30, 17.29; Dec. 3, 17.04.

Faulk County

117-66-35cd. J. Haider. Dug stock well in glacial drift, diameter 4 feet, depth 45 feet. Highest water level 8.29 below lsd, July 29, 1950; lowest 14.65 below lsd, Aug. 25, 1948. Records available: 1946-51. Apr. 12, 12.47; June 22, 12.45; Nov. 6, 12.95.

117-68-36aa. J. Sievers. Drilled stock well in glacial drift, diameter 24 inches, depth 18 feet. Highest water level 5.20 below lsd, June 5, 1950; lowest 8.77 below lsd, Apr. 13, 1946. Records available: 1946-51. Apr. 12, 8.15; June 22, 8.31; Nov. 6, 7.60.

118-66-21ba. V. Elliott. Dug domestic and stock well in glacial drift, diameter 36 inches, depth 7 feet. Highest water level 3.79 below lsd, Nov. 15, 1946; lowest 6.65 below lsd, Sept. 19, 1949. Records available: 1946-51. Apr. 12, 5.96; June 22, 6.12; Oct. 19, 6.24.

119-66-2ab. G. Cihak. Dug domestic and stock well in glacial drift, diameter 24 inches, depth 37 feet. Highest water level 23.84 below lsd, Apr. 22, 1947; lowest 27.93 below lsd, June 13, 1946. Records available: 1946-51. Apr. 17, 25.42; Nov. 2, 25.12. Measurement discontinued.

Haakon County

A-1-25-6dd. A. Elrod. Dug stock well, diameter 24 inches, depth 30 feet. Highest water level 21.92 below lsd, July 26, 1951; lowest 23.95 below lsd, Feb. 5, 1951. Records available: 1946-51.

Date	Water level						
Jan. 8	22.83	Apr. 19	23.41	July 26	21.92	Oct. 23	22.15
Feb. 5	23.95	June 20	22.23	Sept. 9	22.54	Nov. 7	22.00
Mar. 14	22.92	July 9	22.06	26	22.27		

A-8-24-4aa. W. B. Alleman. Dug unused well, diameter 5 feet, depth 20 feet. Highest water level 7.15 below lsd, May 12, 1950; lowest 11.52 below lsd, Sept. 30, 1947. Records available: 1946-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	8.93	May 24	8.43	July 31	9.00	Oct. 3	9.70
Feb. 16	8.88	June 19	8.39	Aug. 21	9.37	31	9.35
Mar. 21	8.81	July 11	8.69	Sept. 10	9.48	Nov. 20	8.18
Apr. 22	8.10						

Hand County

112-66-36dd2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 1, 406.9 feet above msl. Highest water level 13.79 below lsd, Nov. 5, 1951; lowest 16.95 below lsd, Dec. 13, 1949. Records available: 1946-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	15.80	May 22	15.21	Aug. 22	14.01	Oct. 16	13.85
Mar. 26	15.79	June 28	14.32	Sept. 24	13.96	Nov. 5	13.79
Apr. 19	15.54	July 25	14.17				

112-69-3dc. C. Loosey. Dug stock well in glacial drift, diameter 4 feet, depth 30 feet. Highest water level 2.65 below lsd, May 12, 1950; lowest 19.42 below lsd, Nov. 28, 1948. Records available: 1946-51. Jan. 29, 10.11; Mar. 14, 9.80; Apr. 19, 10.11; May 15, 8.11; Aug. 25, 8.18; Oct. 3, 8.78; Nov. 26, 9.44.

113-66-34cccc2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 40 feet. Land-surface datum is 1, 410.5 feet above msl. Highest water level 2.63 below lsd, Apr. 25, 1951; lowest 6.11 below lsd, Feb. 23, 1951. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	5.95	May 23	2.69	Aug. 22	5.12	Oct. 29	5.12
Feb. 23	6.11	June 26	2.76	Sept. 24	5.86	Nov. 26	5.21
Apr. 25	2.63	July 24	4.37				

113-67-34cccc2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 40 feet. Land-surface datum is 1,469.9 feet above msl. Highest water level 7.67 below lsd, July 17, 1950; lowest 9.92 below lsd, Oct. 27, 1951. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	9.45	Apr. 25	8.53	July 24	8.23	Oct. 27	9.92
Feb. 23	9.49	May 23	8.55	Aug. 22	8.60	Nov. 26	9.12
Mar. 26	9.46	June 26	8.59	Sept. 24	8.90		

#### Jerauld County

108-63-5dd. G. Orth. Drilled domestic well in glacial drift, diameter 24 inches, depth 66 feet. Highest water level 30.28 below lsd, Aug. 23, 1948; lowest 35.72 below lsd, Sept. 27, 1949. Records available: 1947-51. Apr. 9, 34.04. Measurement discontinued.

108-64-6cc1. A. C. Crouch. Dug well in glacial drift, diameter 18 inches, depth 23 feet. Highest water level 12.59 below lsd, Sept. 9, 1948; lowest 21.66 below lsd, Sept. 29, 1949. Records available: 1946-51. Apr. 10, 20.50; June 20, 20.53; Oct. 23, 20.57.

#### Marshall County

126-58-8cc. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{3}{4}$  inch, depth 21 feet. Land-surface datum is 1,311.05 feet above msl. Highest water level 14.15 below lsd, June 8, 1951; lowest 15.88 below lsd, Apr. 10, 1951. Records available: 1950-51.

Feb. 9	g15.25	June 8	14.15	July 18	14.18	Sept. 11	14.48
Apr. 10	g15.88	25	14.32	Aug. 1	14.12	Oct. 10	14.79
27	14.72	July 3	14.29	11	14.23	Nov. 29	14.93
May 31	14.54	16	14.18				

g By U. S. Fish and Wildlife Service.

126-59-12cd. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{3}{4}$  inch, depth 24 feet. Land-surface datum is 1,299.85 feet above msl. Highest water level 5.67 below lsd, June 8, 1951; lowest 8.85 below lsd, Nov. 20, 1950. Records available: 1950-51.

Feb. 9	g8.65	June 8	5.67	July 18	6.65	Sept. 11	7.14
Apr. 10	g6.45	25	5.99	Aug. 1	6.68	Oct. 10	7.09
27	6.40	July 3	6.29	11	7.00	Nov. 28	6.94
May 31	6.70	16	5.79				

g By U. S. Fish and Wildlife Service.

127-58-19cc. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{3}{4}$  inch, depth 15 feet. Land-surface datum is 1,291.60 feet above msl. Highest water level 3.95 below lsd, July 16, 1951; lowest 8.10 below lsd, Feb. 9, 1951. Records available: 1950-51.

Feb. 9	g8.10	June 5	4.96	July 16	3.95	Sept. 11	6.72
Apr. 10	g4.60	8	4.36	31	5.70	Oct. 3	6.92
27	5.70	25	5.54	Aug. 11	6.38	Nov. 28	6.45
May 31	5.43	July 2	5.93				

g By U. S. Fish and Wildlife Service.

127-59-33ad. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{3}{4}$  inch, depth 21 feet. Land-surface datum is 1,289.40 feet above msl. Highest water level 4.93 below lsd, July 16, 1951; lowest 9.14 below lsd, Nov. 27, 1950. Records available: 1950-51.

Feb. 9	g8.90	May 31	7.14	July 16	4.93	Sept. 4	7.16
Apr. 10	g7.55	June 8	6.42	Aug. 1	5.85	Oct. 7	7.58
27	7.37	25	6.35	11	6.52	Nov. 29	7.80
May 16	7.14	July 3	6.44				

g By U. S. Fish and Wildlife Service.

#### Minnehaha County

101-49-33bb. C. Donaldson. Dug unused well in glacial drift, diameter 30 inches, depth 12 feet. Highest water level 7.90 below lsd, May 13, 1947; lowest 10.65 below lsd, Feb. 1, 1951. Records available: 1946-51.

Feb. 1	10.65	Apr. 17	9.96	Aug. 29	8.70	Oct. 12	8.62
Mar. 1	9.00	June 28	8.18	Sept. 20	8.61	Nov. 1	8.75

## 198 WATER LEVELS AND ARTESIAN PRESSURES, 1951, NORTH-CENTRAL STATES

Pennington County

A-1-8-17ddd1. E. H. Hoff. Dug stock well in alluvial sand and gravel, depth 18 feet. Highest water level 3.58 below lsd, May 19, 1950; lowest 13.64 below lsd, Feb. 20, 1947. Records available: 1946-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	8.72	Apr. 22	7.62	Aug. 20	10.20	Oct. 18	9.90
Feb. 20	7.93	May 23	6.50	Sept. 18	9.90	Nov. 19	9.25
Mar. 9	7.98	July 18	7.88				

A-1-14-5ab1. A. Tropel. Dug stock well, depth 17 feet. Highest water level 1.54 below lsd, Mar. 9, 1949; lowest 7.80 below lsd, Dec. 8, 1949. Records available: 1946-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	3.98	May 7	3.70	July 9	3.78	Sept. 12	3.90
Feb. 2	3.98	28	3.88	Aug. 1	5.10	Oct. 3	4.30
Mar. 1	3.78	June 18	3.25	22	5.38	29	3.60

Perkins County

A-21-16-15cd. Ronald Ham. Drilled stock well, diameter 1 $\frac{1}{4}$  inches, depth 25 feet. Highest water level 17.05 below lsd, May 1, 1950; lowest 19.80 below lsd, Oct. 15, 1946. Records available: 1946-50. Measurement discontinued.

A-21-16-21bc1. Carl Lutz. Drilled domestic well, diameter 6 inches, depth 32 feet. Highest water level 25.41 below lsd, May 1, 1950; lowest 28.80 below lsd, Oct. 15, 1946. Records available: 1946-50. Measurement discontinued.

A-21-16-21bc2. Carl Lutz. Dug stock well, diameter 5 feet. Highest water level 7.58 below lsd, May 1, 1950; lowest 11.33 below lsd, Dec. 8, 1949. Records available: 1946-50. Measurement discontinued.

A-21-16-29ba. Barnett. Dug domestic well, diameter 30 inches, depth 17 feet. Highest water level 10.67 below lsd, May 1, 1950; lowest 14.22 below lsd, Oct. 6, 1948. Records available: 1946-50. Measurement discontinued.

Sanborn County

106-61-1bd2. Herman Torgenson. Drilled domestic well in glacial drift, diameter 1 inch, depth 14 feet. Highest water level 8.26 below lsd, May 8, 1949; lowest 22.06 below lsd, June 18, 1951. Records available: 1949-51. Apr. 9, 10.39; June 18, 22.06; Oct. 24, 21.03.

108-61-31bc. George Doering. Drilled well, diameter 3 inches, depth 15 feet. Highest water level 6.16 below lsd, June 13, 1946; lowest 10.57 below lsd, Oct. 9, 1947. Records available: 1946-47, 1949-51. Apr. 9, 10.01; June 18, 10.36; Oct. 24, 10.21.

108-62-1cc. H. H. Grant. Dug domestic well in glacial drift, diameter 30 inches, depth 48 feet. Highest water level 33.80 below lsd, June 4, 1947; lowest 49.16 below lsd, May 12, 1950. Records available: 1947-51. Apr. 11, 47.69; June 18, 46.46; Oct. 24, 44.51.

Shannon County

B-38-47-18ac1. Owner unknown. Drilled stock well, depth 20 feet. Highest water level 7.60 below lsd, Jan. 5, 1948; lowest 14.05 below lsd, Mar. 4, 1947. Records available: 1946-50. Measurement discontinued.

Spink County

114-62-33bc. F. E. McDonald. Dug and drilled domestic and stock well in glacial drift, diameter 36 inches, depth 35 feet. Highest water level 21.71 below lsd, Apr. 26, 1948; lowest 25.00 below lsd, Nov. 14, 1948. Records available: 1946-51. May 22, 23.57; Nov. 6, 23.66.

114-65-8cb. H. L. Binger. Drilled stock well in glacial drift, diameter 18 inches, depth 27 feet. Highest water level 16.49 below lsd, May 15, 1950; lowest 19.72 below lsd, Nov. 15, 1948. Records available: 1946-51. Apr. 16, 18.87; Oct. 31, 19.55.

115-62-7ddd. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 27 feet. Land-surface datum is 1,294.1 feet above msl. Highest water level 20.58 below lsd, May 22, 1950; lowest 25.50 below lsd, Mar. 1, 1949. Records available: 1948-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	24.20	Apr. 25	24.14	July 26	24.16	Oct. 31	24.16
Feb. 21	24.22	May 21	24.20	Sept. 28	24.45	Nov. 21	24.25
Mar. 28	24.43	June 25	24.10				

115-63-4aaa. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 1,293.8 feet above msl. Highest water level 10.80 below lsd, July 26, 1948; lowest 17.80 below lsd, Sept. 22, 1950. Records available: 1948-51.

Date	Water level						
Jan. 31	16.58	Apr. 25	16.74	July 26	16.98	Oct. 31	16.71
Feb. 21	16.41	May 21	16.95	Aug. 22	16.98	Nov. 21	16.91
Mar. 28	16.18	June 24	16.98	Oct. 11	17.00		

115-65-5cd1. M. J. Handcock. Dug domestic well in glacial drift, diameter 18 inches, depth 18 feet. Highest water level 9.63 below lsd, Apr. 28, 1948; lowest 12.54 below lsd, Sept. 26, 1950. Records available: 1946-51. Apr. 17, 12.10; June 22, 12.16; Nov. 6, 12.24.

116-63-36dddd. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 1,294.5 feet above msl. Highest water level 22.10 below lsd, Jan. 6, Mar. 1, Apr. 1, 1949; lowest 25.43 below lsd, Oct. 31, 1951. Records available: 1948-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	22.48	Apr. 25	22.38	July 25	22.42	Oct. 31	25.43
Feb. 21	22.36	May 21	22.43	Sept. 28	22.40	Nov. 20	25.10
Mar. 28	22.38	June 25	22.43				

116-64-3db. L. J. Hillested. Dug domestic and stock well in glacial drift, diameter 18 inches, depth 22 feet. Highest water level 9.88 below lsd, Dec. 7, 1950; lowest 13.78 below lsd, Mar. 18, 1951. Records available: 1946-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	13.18	Apr. 22	12.24	Aug. 21	12.02	Oct. 25	12.50
31	12.86	24	12.96	Sept. 12	12.34	Nov. 22	12.27
Mar. 18	13.78	Aug. 1	12.20	Oct. 5	12.27	26	12.59
Apr. 6	12.35						

119-64-3bbbb. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 1,292.2 feet above msl. Highest water level 11.70 below lsd, July 26, 1948; lowest dry Feb. 21, Mar. 21, 1950.

Date	Water level						
Jan. 29	21.55	Apr. 28	20.48	June 30	17.08	Aug. 24	19.11
Feb. 22	22.10	May 18	18.89	July 28	18.19	Oct. 31	20.63
Mar. 30	22.28						

120-63-6bbbb. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 1,297.4 feet above msl. Highest water level 18.20 below lsd, July 26, 1948; lowest 21.81 below lsd, Oct. 25, 1950. Records available: 1948-51.

Date	Water level						
Jan. 29	20.72	Apr. 26	20.85	June 30	20.44	Aug. 24	20.25
Feb. 21	20.85	May 18	20.71	July 28	20.28	Oct. 31	20.41
Mar. 30	20.95						

120-63-31ccdd. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 1,296.9 feet above msl. Highest water level 18.80 below lsd, July 26, 1948; lowest 23.75 below lsd, May 22, 1950. Records available: 1948-51.

Date	Water level						
Jan. 29	21.47	Apr. 26	21.82	June 30	21.69	Aug. 24	21.29
Feb. 21	21.55	May 18	21.78	July 28	21.51	Oct. 31	21.12
Mar. 30	21.72						

120-64-16dddd. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 26 feet. Land-surface datum is 1,293.2 feet above msl. Highest water level 21.42 below lsd, July 28, 1951; lowest dry, Apr. 20, 1950. Records available: 1948-51.

Date	Water level						
Jan. 29	22.81	Apr. 28	22.99	June 30	21.70	Aug. 24	21.48
Feb. 22	23.05	May 18	22.48	July 28	21.42	Oct. 31	21.99
Mar. 30	23.42						

120-65-36dddd. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Land-surface datum is 1,295 feet above msl. Highest water level 4.20 below lsd, July 26, 1948; lowest 10.50 below lsd, Feb. 21, 1950. Records available: 1948-51.

Date	Water level						
Jan. 29	9.42	Apr. 28	7.92	June 30	6.08	Aug. 24	7.16
Feb. 22	9.57	May 18	7.22	July 28	6.67	Oct. 31	8.18
Mar. 30	9.46						

Walworth County

121-76-2dc. M. Anderson. Drilled domestic well in alluvial sand and gravel, diameter 36 inches, depth 25 feet. Highest water level 4.20 below lsd, June 6, 1950; lowest 12.23 below lsd, May 16, 1943. Records available: 1943, 1947-51. Jan. 25, 7.03; Feb. 14, 6.8'; May 23, 4.88; July 12, 5.27; Aug. 22, 7.16; Oct. 1, 6.20; Nov. 9, 6.35.

Yankton County

93-56-14aa. Mrs. J. M. Kayser. Drilled well, depth 80 feet. Highest water level 37.52 below lsd, June 26, 1951; lowest 47.52 below lsd, June 11, 1947. Records available: 1946-51. Jan. 30, 45.55; Mar. 31, 44.61; Apr. 16, 45.33; June 26, 37.52; Sept. 21, 38.22; Oct. 10, 40.21; Oct. 31, 41.66.

## WISCONSIN

By W. J. Drescher

### Scope of Water-Level Program

The observation-well program was continued in 1951 in cooperation with the University of Wisconsin. Water levels in four wells near the Brule River in Forest County and in one well near the Menominee River in Marinette County were measured as a part of the ground-water studies in the Northern Peninsula of Michigan. Measurements were made in 188 wells, 22 of which were equipped with recording gages. Figures 22-26 show the location of observation wells in the State. Reports on Brown County and the Milwaukee-Waukesha area were prepared for publication as Water-Supply Papers 1190 and 1229. (1190, W. J. Drescher, Ground-water conditions in artesian aquifers in Brown County, Wis.; 1229, F. C. Foley, W. C. Walton, and W. J. Drescher, Ground-water conditions in the Milwaukee-Waukesha area, Wis.)

### Precipitation

The total precipitation in Wisconsin in 1951, 38.24 inches, was 7.48 inches above normal. Precipitation was above average throughout the State in 1951, whereas in 1950 the State as a whole was above average but the central part of the State was below average. 1951 was the wettest year since 1938. The temperature for 1951 was 41.6° F., which was 1.8° below average and 0.5° above 1950 average.

### Pumpage

Because of the increased precipitation and cooler weather, pumpage was generally below normal in 1951. Pumpage for irrigation was less than in 1950 but exact figures are not available. In the heavily pumped areas in Milwaukee and in Green Bay, pumpage was greater than in 1950. The increase in pumpage at Green Bay was less than the yearly increase since 1947. In Milwaukee the pumpage was a little more than in 1950 but less than in 1949. The average pumpage was about 11.8 million gallons a day at Green Bay and about 19.8 million gallons a day at Milwaukee.

### Interpretation of Water-Level Fluctuations

Static water levels in three artesian wells are shown in figure 27. Fluctuations of water level in well Bn 9, near the center of the cone of depression in Green Bay, Brown County, are a direct result of pumping in the area. The slope of a line drawn through the yearly high water levels in Bn 9 is steeper than that of a line through the yearly low water levels. This indicates that the distribution of pumpage is not as concentrated near the observation well as previously. The fluctuations in well MI 36 reflect changes in the rate of pumping in the Milwaukee area. The lowest static water level in MI 36 in 1951 occurred on August 18 and was only 2.85 feet lower than the previous lowest level which occurred in 1949. Well Ke 6, in Kenosha County, is near the coalescence of the Milwaukee and Chicago cones of depression. The hydrograph of this well shows little seasonal fluctuation, but the general downward trend over several years indicates continually increasing pumping in the two areas. Hydrographs of static water levels in four water-table wells are shown in figure 28. In each case the fluctuations of water levels are results of precipitation. The rise in early spring is influenced by the amount of rain, the rate of melting and amount of snow, and whether the ground is frozen. In the spring of 1951 unfrozen ground, heavy spring rains, and greater than average snow cover contributed to the rise in water levels.

### Acknowledgments

Eight wells in northern Wisconsin were measured by the State Conservation Department.

### Well-Numbering System

Wells are numbered consecutively within each county. The counties are designated by a two-letter abbreviation derived from the county name. For example, Bn 9 designates well number 9 in Brown County.

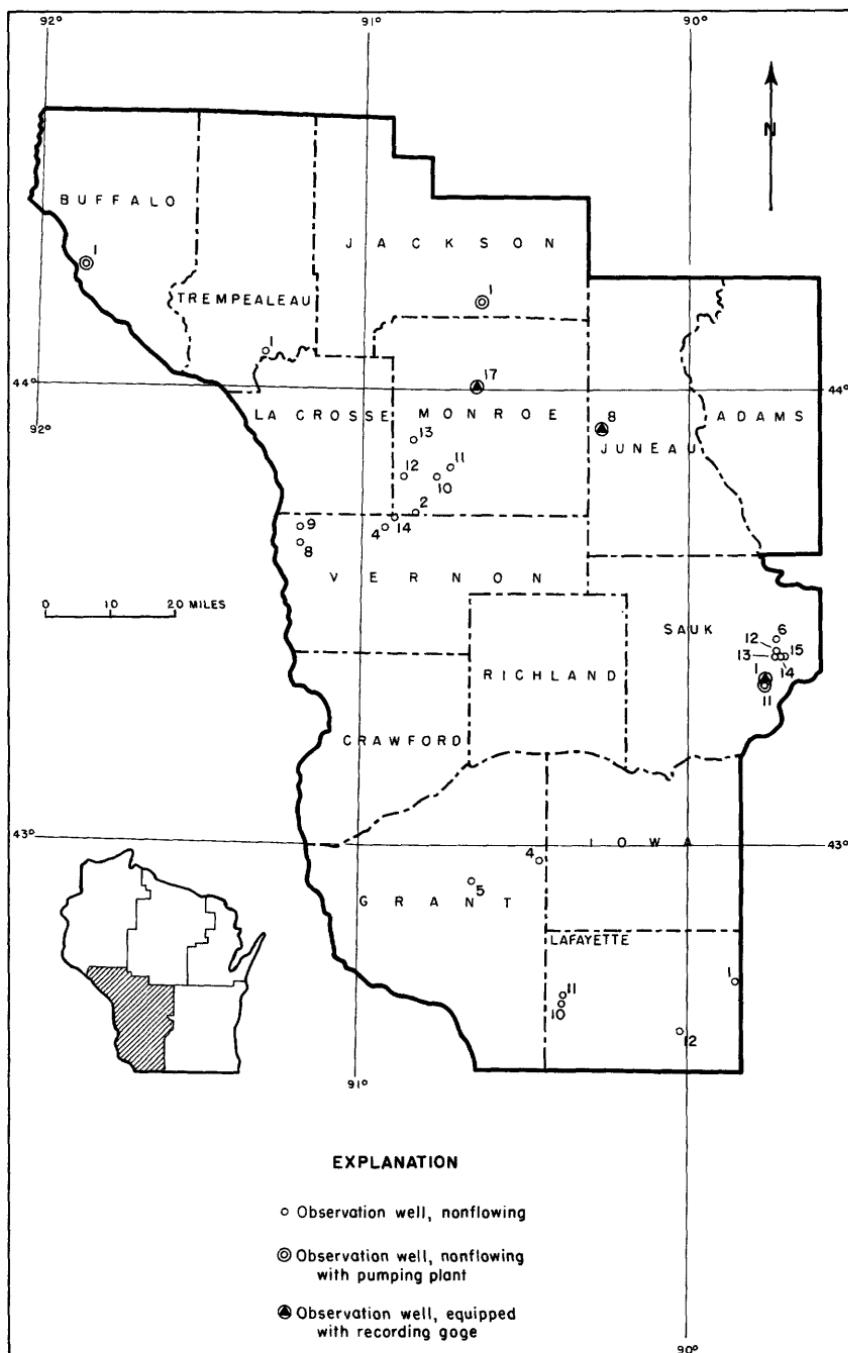


Figure 22.--Location of observation wells in southwestern Wisconsin, 1951.

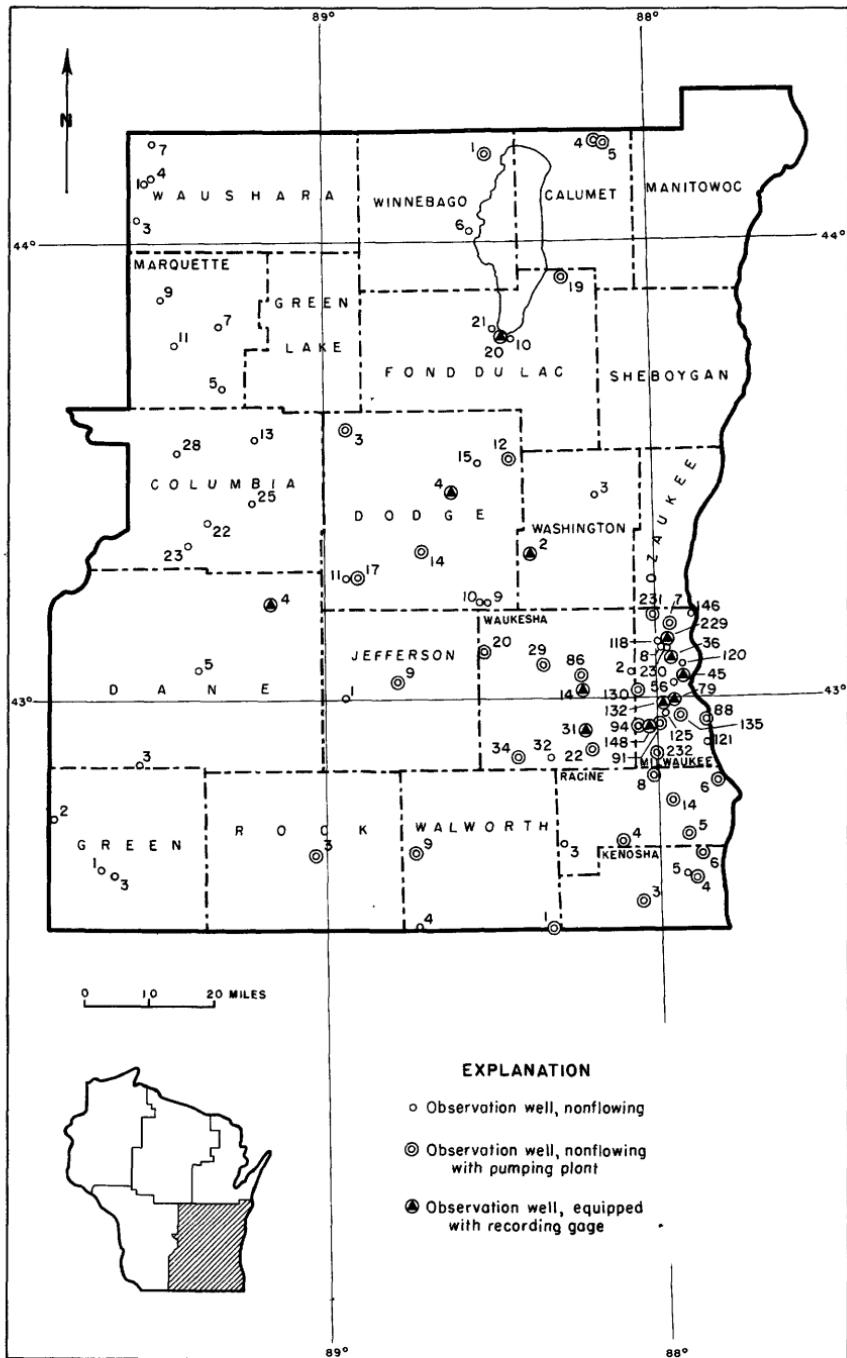


Figure 23. --Location of observation wells in southeastern Wisconsin, 1951.

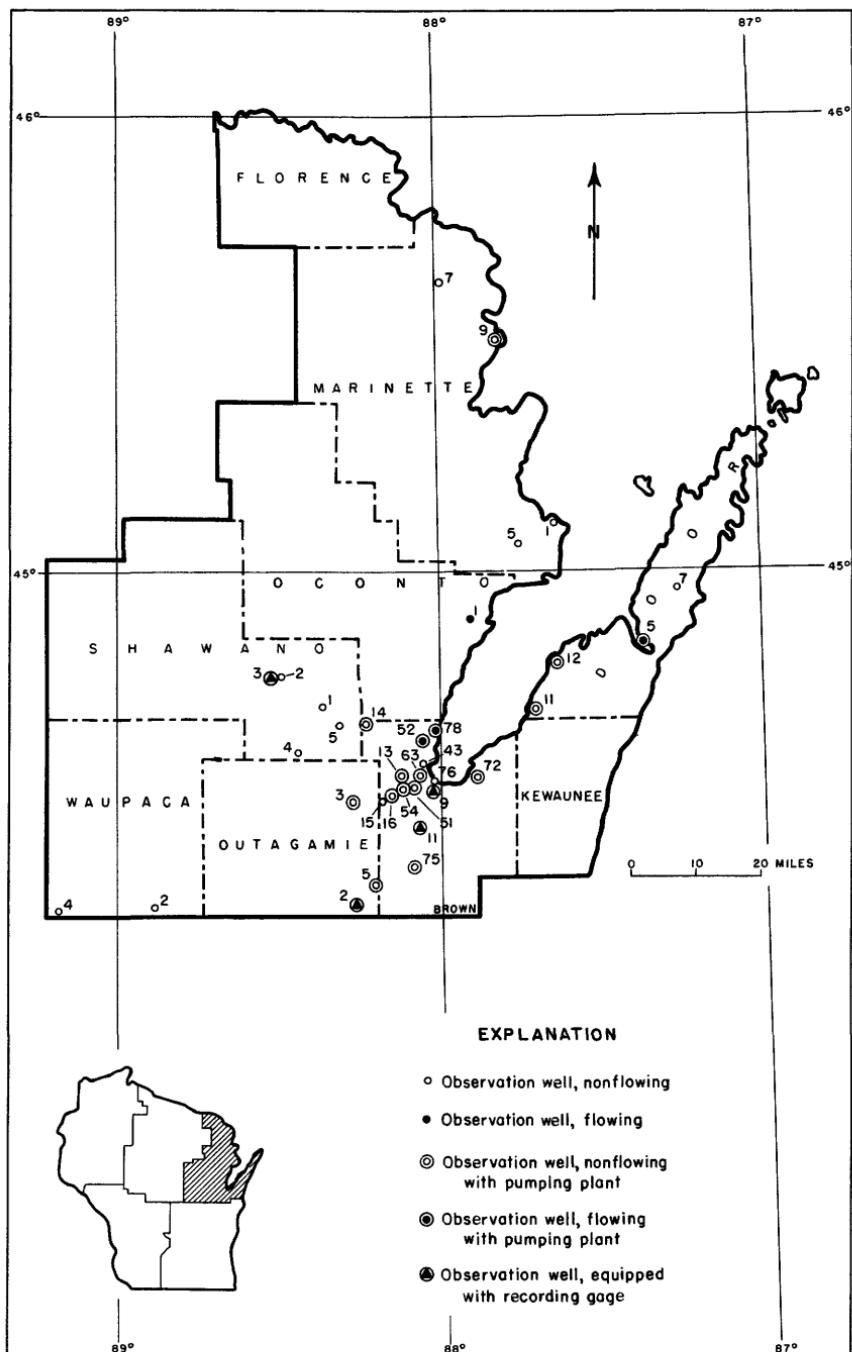


Figure 24. --Location of observation wells in northeastern Wisconsin, 1951.

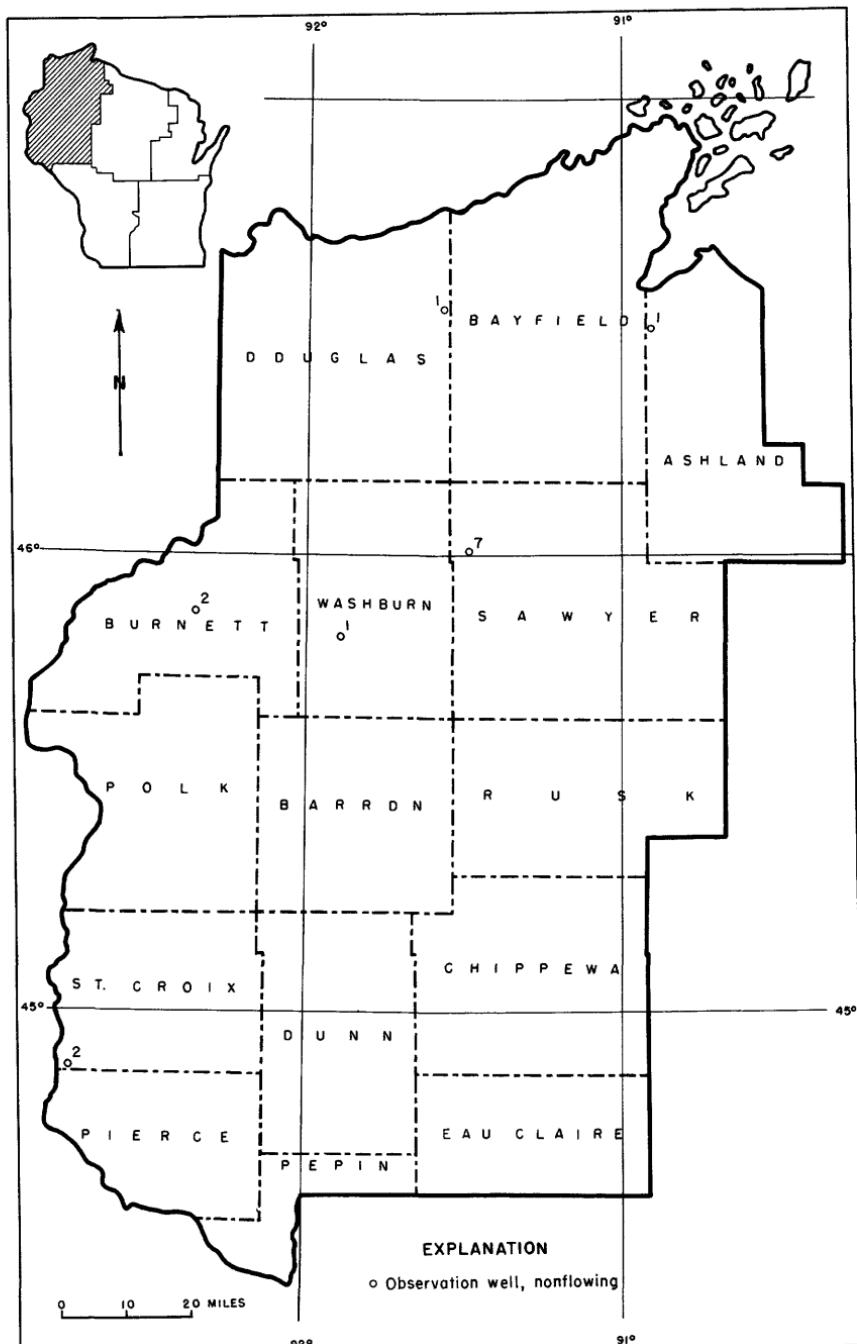


Figure 25.--Location of observation wells in northwestern Wisconsin, 1951.

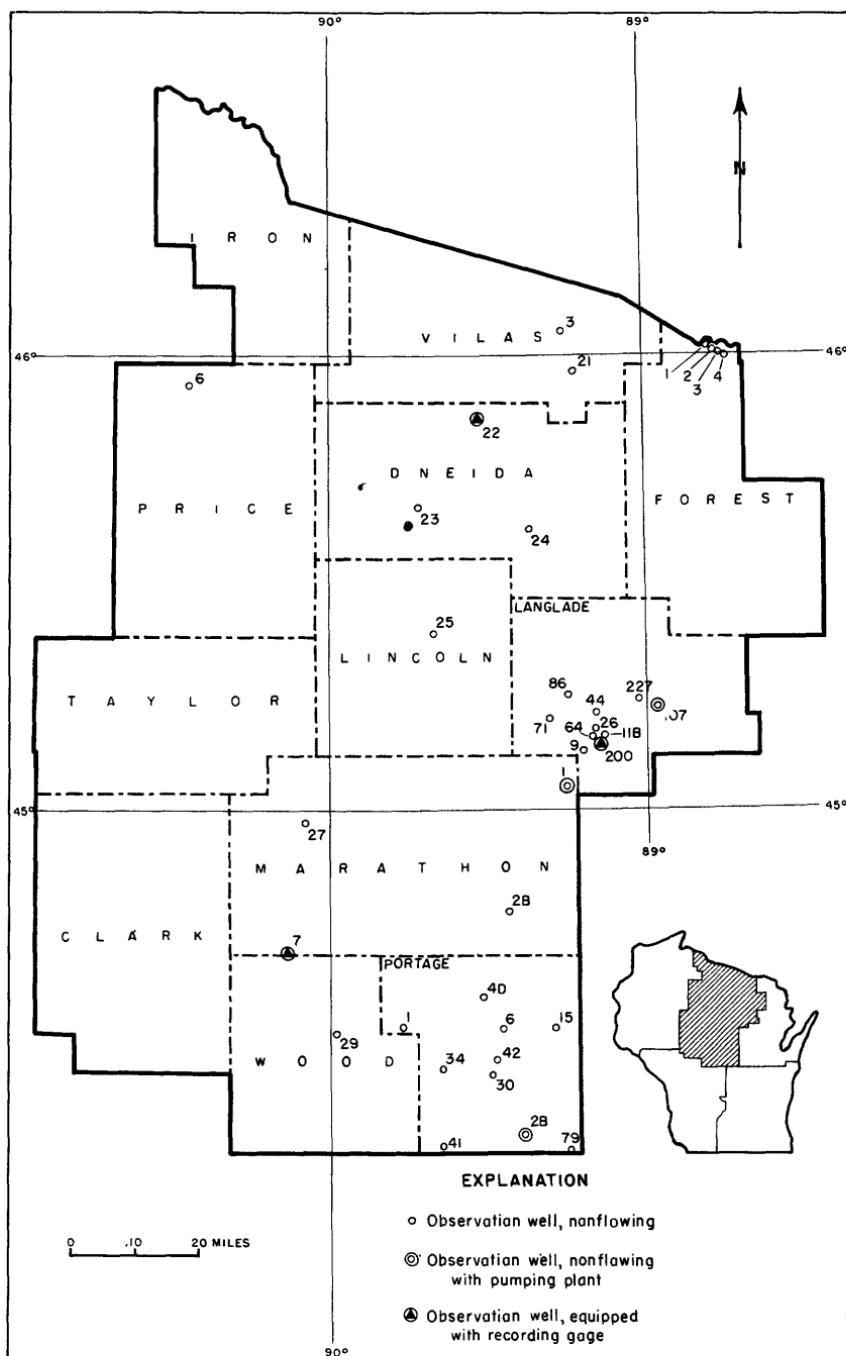


Figure 26.--Location of observation wells in north-central Wisconsin, 1951.

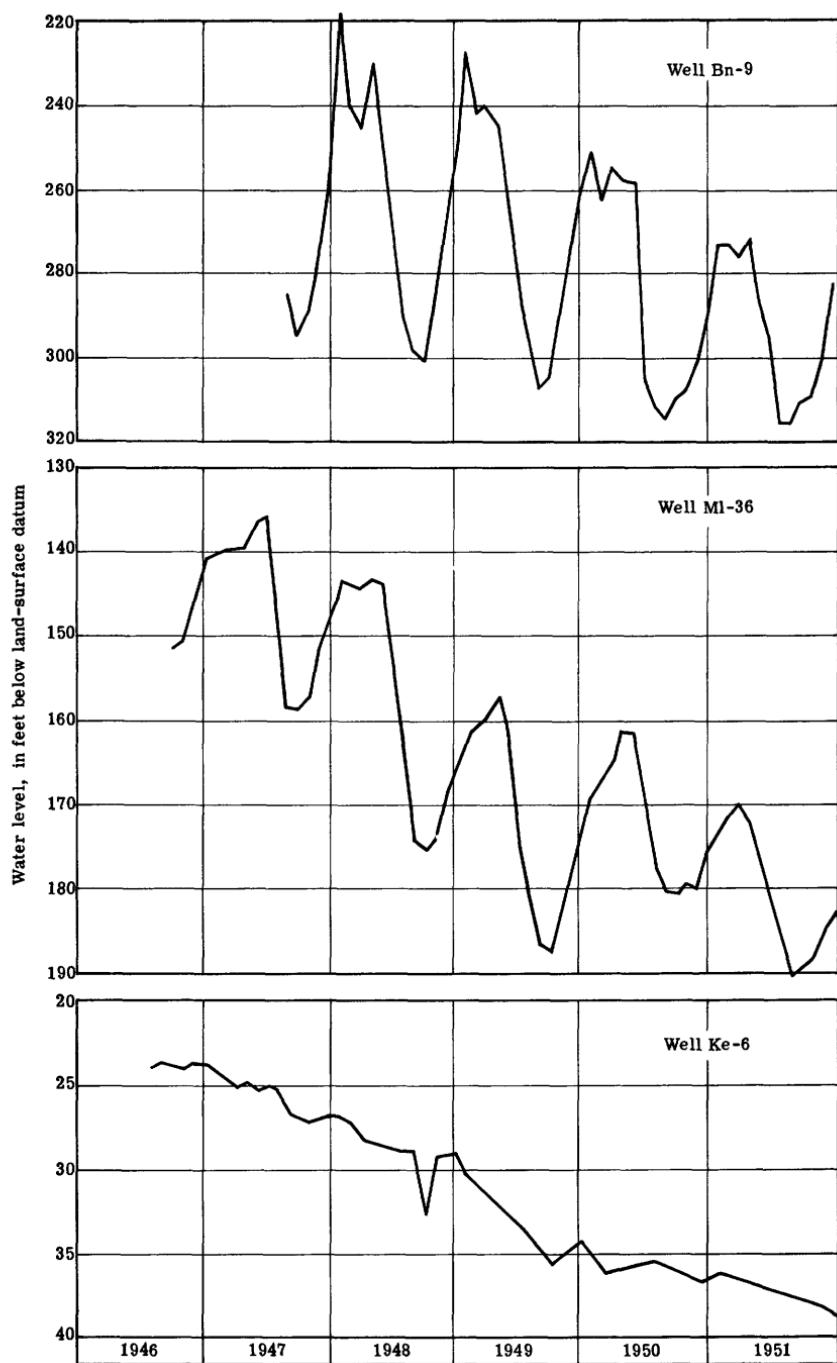


Figure 27. --Water levels in selected artesian wells in eastern Wisconsin.

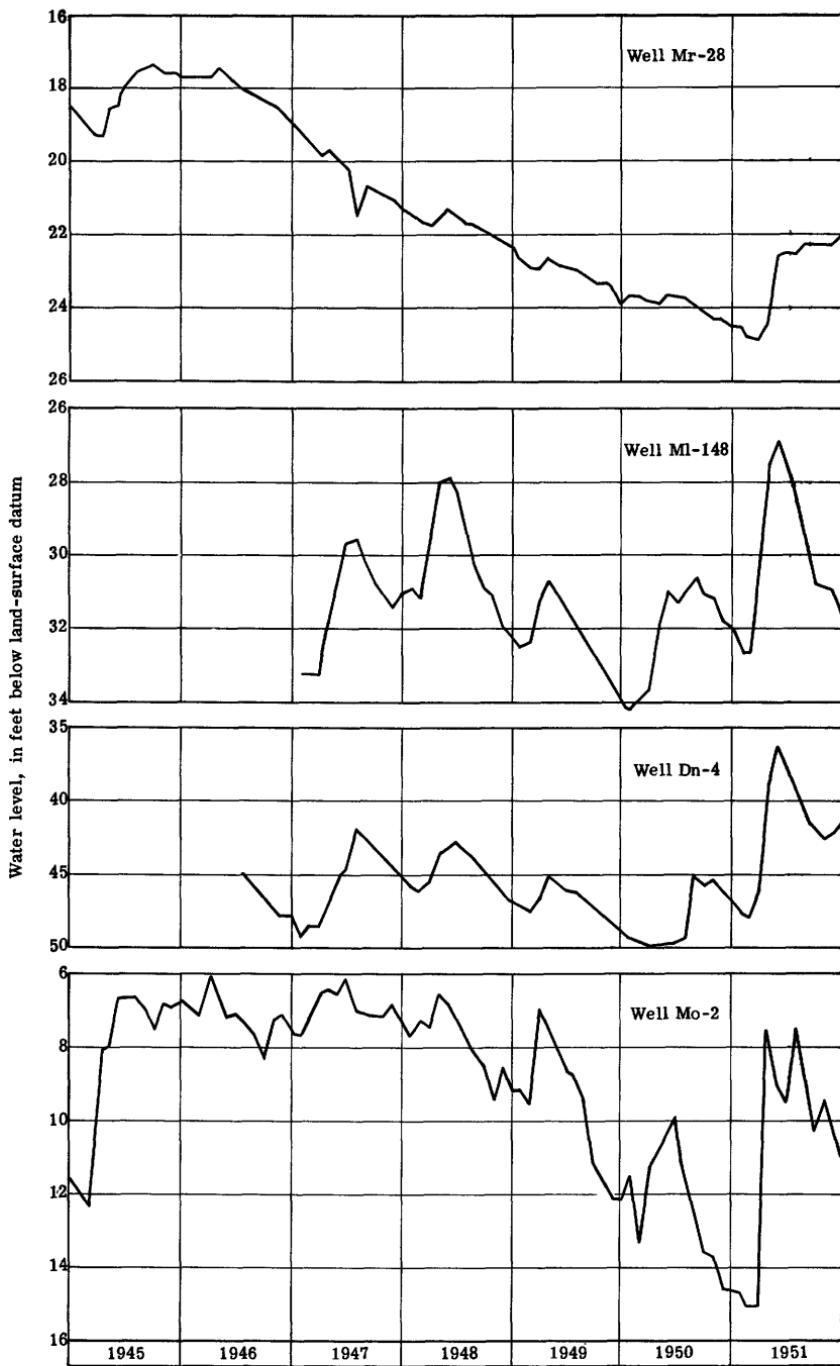


Figure 28. --Water levels in wells Mr-28, MI 148, Dn-4, and Mo-2, Wisconsin.

**Well Descriptions and Water-Level Measurements**

Water levels are in feet below land-surface datum unless otherwise indicated. When some measurements in a table are above and others below the plane of reference, a plus (+) or minus (-) sign is placed immediately preceding the first entry in each column of each mixed table. Readings between minus (-) signs are below the plane of reference, and those between plus (+) signs are above the plane of reference.

Ashland County

As 1. Lake Superior District Power Co. NE<sub>4</sub><sup>1</sup>NE<sub>4</sub><sup>1</sup> sec. 6, T. 46 N., R. 4 W. Drilled unused water-table well in sandstone, diameter 4 inches, reported depth 90 feet, cased to 15. Highest water level 1.05 below lsd, Apr. 10, 1950; lowest 4.15 below lsd, Sept. 27, 1948. Records available: 1943-45, 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	2.73	Apr. 9	1.54	June 25	1.93	Oct. 1	2.22
8	2.73	16	1.80	July 2	2.42	8	2.10
15	2.81	22	2.07	16	2.35	15	2.35
22	2.78	30	2.19	30	2.78	29	2.35
29	2.79	May 8	2.55	Aug. 13	2.65	Nov. 5	2.35
Feb. 5	2.71	14	2.72	20	2.63	15	1.85
12	2.71	21	2.65	27	2.45	26	2.50
19	2.53	28	2.15	Sept. 4	2.25	Dec. 3	2.21
26	2.09	June 4	2.00	10	2.07	10	2.33
Mar. 19	2.35	11	2.50	17	2.21	17	2.71
28	2.05	18	2.63	24	2.12	31	2.45
Apr. 2	2.10						

Brown County

Bn 9. Larsen Canning Co. 320 North Broadway, Green Bay. Drilled unused artesian well in sandstone, diameter 8 inches, depth 800 feet. Highest water level 210.87 below lsd, Apr. 19, 1948; lowest 315.50 below lsd, Aug. 3, 1951. Records available: 1947-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	267.40	265.99	270.32	257.22	267.63	286.59	294.80	313.89	310.00	303.59	298.02	280.76
2	265.41	268.44	271.56	263.55	268.87	285.85	297.92	314.04	304.72	304.98	299.05	277.08
3	268.28	270.27	269.57	265.22	268.18	279.42	296.81	315.50	302.50	307.00	300.70	281.87
4	267.95	264.47	265.82	267.48	270.19	282.16	291.38	314.27	299.90	305.43	290.00	279.20
5	268.41	269.63	270.05	269.02	268.61	283.49	290.00	307.50	302.69	307.02	297.12	281.38
6	267.91	270.31	272.81	257.67	264.07	285.05	289.87	309.20	302.82	306.20	297.90	277.80
7	261.82	269.22	275.06	261.61	269.70	286.10	290.40	311.00	304.43	302.49	296.19	281.42
8	264.97	268.41	274.28	260.15	269.49	288.00	290.39	309.68	305.32	304.13	294.58	281.77
9	265.28	269.83	274.32	262.80	272.51	287.62	295.42	309.65	300.95	304.20	295.81	274.70
10	270.31	270.21	274.33	262.93	270.47	283.50	296.10	311.30	302.05	306.03	294.03	277.31
11	270.07	264.59	269.93	263.77	270.15	288.57	297.98	309.90	302.78	306.90	290.47	276.85
12	272.45	269.87	273.89	265.08	270.02	290.70	298.90	307.80	305.88	308.38	296.65	279.05
13	272.24	270.92	273.21	263.53	266.62	292.52	302.00	309.40	305.90	309.00	296.10	276.52
14	268.00	269.76	274.02	263.93	269.79	294.09	302.50	309.92	306.63	305.25	295.21	277.87
15	270.25	269.22	275.76	260.71	269.71	295.72	299.60	309.70	306.91	307.42	293.95	274.32
16	269.47	268.73	274.89	265.31	272.72	295.32	304.55	307.90	302.33	306.80	294.64	270.85
17	270.58	269.81	275.21	265.90	274.65	293.00	306.68	305.81	305.48	307.56	292.07	274.57
18	270.27	268.10	266.37	267.58	276.11	298.20	307.73	306.02	304.40	304.72	288.93	273.81
19	269.74	269.98	271.35	266.33	276.38	298.98	308.74	299.77	306.10	306.90	293.12	275.71
20	270.50	270.92	270.31	269.29	271.78	298.37	310.32	301.37	306.69	304.00	291.35	274.46
21	262.56	273.02	268.45	269.18	278.34	296.60	310.83	300.60	308.42	297.78	295.85	274.74
22	269.40	271.51	268.15	263.97	281.73	298.63	307.42	301.00	308.11	301.55	292.42	273.55
23	269.33	272.02	269.12	269.00	281.50	297.50	309.90	300.38	304.87	300.75	292.03	266.20
24	271.19	272.76	267.97	269.28	284.22	290.50	309.62	301.42	306.89	302.72	291.00	270.04
25	270.87	265.93	261.21	267.97	285.40	296.02	311.60	301.10	307.50	303.15	283.91	.....
26	270.29	268.78	265.22	267.46	285.86	294.88	311.60	297.05	307.10	302.88	288.33	.....
27	271.17	269.48	264.35	268.60	281.39	295.22	313.71	299.67	305.55	299.75	285.04	276.01
28	265.21	271.51	263.99	268.12	285.33	298.16	315.00	302.10	305.60	294.13	286.58	276.27
29	263.42	261.91	262.00	285.60	298.30	311.92	304.45	302.68	299.98	284.03	277.86	
30	265.72	263.23	266.48	286.52	297.00	310.30	307.92	301.00	299.12	284.92	274.55	
31	267.43	264.10		286.50		311.60	309.41		299.99		279.31	

Bn 11. City of De Pere. Broadway and George Sts. Drilled unused artesian well in sandstone, diameter 12 inches, reported depth 835 feet. Land-surface datum is 612 feet above msl. Highest water level 85.32 below lsd, May 12, 1947; lowest 142.80 below lsd, Sept. 28, 1951. Records available: 1946-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1	128.00	132.88			128.90	134.86	135.00	139.50	137.00	142.03	135.18	134.80	
2	130.89	132.41			129.18	134.23	136.29	139.30	132.90	142.23	134.69	129.52	
3	129.61	132.02	131.81		129.11	133.32	135.22	139.58	131.10	141.59	135.49	132.98	
4	130.06	130.49	131.59		129.36	134.07	133.20	140.15	137.82	141.29	130.88	134.18	
5	129.73	132.26			129.38	134.38	133.09	138.79	138.04	141.13	135.63	134.13	
6	130.12	131.07	131.13		128.20	133.75	132.09	138.40	139.20	140.62	136.62	132.98	
7	129.59	134.85			129.08	134.18	132.39	138.50	137.91	135.40	136.48	134.78	
8	129.70	137.49			129.60	134.55	131.32	139.00	139.50	138.69	136.37	133.87	
9	129.91	138.79			129.65	135.15	132.67	139.28	138.93	142.40	136.90	129.85	
10	129.61	139.11			129.97	134.32	133.12	140.60	140.67	142.58	135.95	132.75	
11	129.83	138.15			130.25	135.76	133.47	140.30	140.87	142.20	132.14	134.44	
12	130.45	138.10			130.95	134.88	134.28	139.20	140.50	139.60	134.21	135.40	
13	130.31	136.14			130.13	134.33	135.15	140.00	140.42	138.86	134.94	135.34	
14	129.30	135.24			131.01	134.52	136.30	141.67	140.81	133.86	136.10	135.62	
15	130.71	135.02			132.24	134.63	135.10	141.32	141.50	136.49	136.55	135.20	
16	129.70	134.40			131.87	135.98	135.57	141.40	140.61	135.78	136.08	130.33	
17	130.08	134.14			131.89	134.52	135.97	142.09	141.28	137.58	135.67	134.61	
18	129.49	134.73	129.28		133.06	134.85	136.58		141.70	135.98	130.99	134.80	
19	130.05	135.38	129.39		133.00	134.55	136.68		142.07	138.15	134.72	135.20	
20	.....	135.30	129.07		132.14	134.94	137.33	141.45	141.88	136.22	136.48	133.73	
21	129.55	133.90			128.40	133.92	135.35	136.30	141.52	141.90	132.75	136.10	134.38
22	130.03	133.95			127.20	132.30	135.71	135.10	141.76	141.81	137.31	130.74	133.70
23	129.76	134.04			128.50	132.65	136.42	136.11	142.68	140.00	136.75	135.22	130.26
24	130.28	133.18			128.48	135.10	134.90	136.73	141.25	141.55	135.95	132.40	133.73
25	130.55	132.29			128.42	.....	135.57	137.96	140.97	141.40	136.17	130.10	.....
26	130.52	.....			129.50	.....	134.87	138.65	140.02	141.31	137.20	133.01	.....
27	129.73	.....	131.18		129.00	.....	135.40	137.40	139.92	141.18	137.52	134.80	132.40
28	129.35	.....			128.91	.....	135.34	137.83	141.00	142.80	132.92	135.33	133.06
29	130.40	.....			127.21	132.82	135.45	137.60	141.00	141.90	135.63	135.00	132.48
30	133.30	.....			129.26	135.12	136.64	140.50	140.77	140.77	133.30	134.84	128.40
31	132.71	.....			134.65	.....	139.90	138.18		137.78	.....	131.16	.....

Bn 13. William Herber. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 24 N., R. 20 E. Drilled stock artesian well in St. Peter sandstone and Platteville limestone, diameter 6 inches, reported depth 250 feet, cased to 90. Land-surface datum is 681 feet above msl. Highest water level 12.13 below lsd, June 25, 1947; lowest 20.84 below lsd, Dec. 9, 1949. Records available: 1947-51. Feb. 7, 20, 29; Apr. 13, 14, 85; July 11, 15, 82; Sept. 20, 17, 10; Dec. 6, 14, 05.

Bn 14. Village of Pulaski. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, T. 25 N., R. 19 E. Drilled municipal artesian well in sandstone, diameter 12 inches, reported depth 330 feet, cased to 118. Land-surface datum is 803 feet above msl. Highest water level 31.89 below lsd, May 29, 1947; lowest 39.10 below lsd, Sept. 23, 1949. Records available: 1947-51. Apr. 13, 37.60; Sept. 23, 39.07; Dec. 6, 36.23.

Bn 15. Larsen Canning Co. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 24 N., R. 19 E. Drilled unused artesian well in sandstone, diameter 6 inches, reported depth 500 feet. Land-surface datum is 660 feet above msl. Highest water level 0.03 above lsd, Aug. 19, 1947; lowest 12.91 below lsd, Nov. 22, 1950. Records available: 1947-51. Feb. 7, 11.44; Apr. 13, 9.74; July 11, 10.06; Sept. 20, 12.10; Dec. 6, 11.18.

Bn 16. Larsen Canning Co. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 35, T. 24 N., R. 19 E. Drilled domestic and stock artesian well in sandstone, diameter 8 inches, reported depth 800 feet. Land-surface datum is 659 feet above msl. Highest water level 3.98 below lsd, May 13, 1947; lowest 23.39 below lsd, Sept. 20, 1951. Records available: 1947-51. July 11, 20.79; Sept. 20, 23.39; Dec. 6, 22.55.

Bn 43. Harry Nick. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 24 N., R. 20 E. Drilled unused artesian well in St. Peter sandstone, diameter 5 inches, depth 297 feet. Highest water level 7.72 below lsd, Mar. 18, 1948; lowest 33.50 below lsd, Dec. 5, 1951. Records available: 1948-51. Feb. 7, 27.06; Apr. 12, 24.64; July 10, 25.59; Sept. 20, 33.18; Dec. 5, 33.50.

Bn 51. Larsen Orchards. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 29, T. 24 N., R. 20 E. Drilled domestic artesian well in sandstone, diameter 6 inches, reported depth 800 feet. Land-surface datum is 698 feet above msl. Highest water level 114.35 below lsd, May 25, 1950; lowest 120.87 below lsd, Sept. 14, 1948. Records available: 1948-51. Feb. 7, 116.86; Apr. 13, 115.33; July 11, 115.61; Sept. 20, 119.47; Dec. 6, 117.86.

Bn 52. Suamico Dairy and Locker Co. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 22, T. 25 N., R. 20 E. Drilled domestic artesian well in sandstone, diameter 6 inches, reported depth 540 feet. Land-surface datum is 606 feet above msl. Highest water level 7.00 above lsd, Sept. 22, 1949; lowest 3.2 above lsd, Dec. 5, 1951. Records available: 1948-51. Apr. 12, +3.8; July 10, +4.5; Sept. 20, +3.8; Dec. 5, +3.2.

Bn 54. William Dulgat. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 30, T. 24 N., R. 20 E. Drilled domestic artesian well in sandstone, diameter 6 inches, reported depth 275 feet. Land-surface datum is 699 feet above msl. Highest water level 90.61 below lsd, June 10, 1949; lowest 93.93 below lsd, Nov. 22, 1950. Records available: 1948-51. Feb. 7, 92.80; Apr. 13, 91.10; July 11, 93.01; Sept. 20, 93.24; Dec. 6, 92.46.

Bn 63. Joseph Michaels. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 15, T. 24 N., R. 20 E. Drilled domestic and stock artesian well in sandstone, diameter 6 inches, reported depth 404 feet, cased to 90. Land-surface datum is 596 feet above msl. Highest water level 93.44 below lsd, May 5, 1949; lowest 126.85 below lsd, Sept. 20, 1951. Records available: 1948-51. Apr. 12, 105.53; July 10, 117.90; Sept. 20, 126.85; Dec. 5, 122.21.

Bn 72. Gregoire Denis. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 13, T. 24 N., R. 21 E. Drilled domestic artesian well in sandstone, diameter 8 to 6 inches, reported depth 1,006 feet, cased to 400. Land-surface datum is 735 feet above msl. Highest water level 233 below lsd, Feb. 8, 1950; lowest 253 below lsd, Sept. 19, 1951. Records available: 1949-51. Feb. 6, 254; Apr. 12, 240; July 10, 248; Sept. 19, 253; Dec. 5, 253.

Bn 75. Mrs. Len Keyser. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 28, T. 22 N., R. 20 E. Drilled domestic and stock artesian well in sandstone, diameter 6 inches, reported depth 726 feet. Land-surface datum is 710 feet above msl. Highest water level 97.52 below lsd, June 8, 1949; lowest 105.16 below lsd, Dec. 4, 1951. Records available: 1949-51. Feb. 5, 103.13; July 9, 103.11; Sept. 19, 104.42; Dec. 4, 105.16.

Bn 76. Wisconsin Public Service Corp. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 24, T. 24 N., R. 20 E. Drilled unused artesian well in sandstone, diameter 5 inches, reported depth 500 feet, cased to 150. Highest water level 166.33 below lsd, Apr. 26, 1950; lowest 209.73 below lsd, Sept. 20, 1951. Records available: 1950-51. Feb. 6, 182.64; Apr. 12, 180.16; July 10, 198.84; Sept. 20, 209.73; Dec. 5, 198.66.

Bn 78. Carl Jenkins. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 7, T. 25 N., R. 21 E. Drilled domestic artesian well in sandstone, diameter 6 inches, reported depth 198 feet. Highest water level 20.5 above lsd, Sept. 22, 1949; lowest 6.2 above lsd, Dec. 5, 1951. Records available: 1949-51. Apr. 12, +14.0; July 10, +15.5; Sept. 20, +16.5; Dec. 5, +6.2.

Bn 80. Green Bay Packer Corp. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 14, T. 25 N., R. 22 E. Drilled domestic artesian well in sandstone, diameter 8 inches, reported depth 1,043 feet. Highest water level 130.36 below lsd, Oct. 6, 1949; lowest 138.08 below lsd, Dec. 5, 1951. Records available: 1949-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 6, 1949	130.36	May 24, 1950	131.06	Nov. 21, 1950	133.65	Sept. 19, 1951	136.98
Feb. 8, 1950	132.10	July 27	131.79	Apr. 12, 1951	134.97	Dec. 5	138.08
Apr. 6	131.73	Sept. 20	132.84	July 10	135.88		

Bn 81. Robert Cowles. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 15, T. 23 N., R. 20 E. Drilled unused well, diameter 6 inches. Highest water level 99.19 below lsd, May 24, 1950; lowest 102.18 below lsd, Sept. 19, 1951. Records available: 1949-51.

Nov. 8, 1949	100.59	Sept. 20, 1950	101.47	Apr. 11, 1951	100.90	Sept. 19, 1951	102.18
May 24, 1950	99.19	Nov. 20	101.75	July 9	101.03	Dec. 4	101.77
July 26	100.22	Feb. 5, 1951	101.40				

#### Buffalo County

Bf 1. Donald C. De Marce. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 29, T. 21 N., R. 12 W. Drilled domestic water-table well in sandstone, diameter 4 inches, depth 78 feet. Highest water level 28.54 below lsd, Apr. 19, 1951; lowest 31.01 below lsd, Jan. 12, 1949. Records available: 1947-51. Feb. 14, 30.65; Apr. 19, 28.54; July 19, 30.43; Sept. 26, 29.51; Nov. 28, 29.79.

Burnett County

Bt 2. Wisconsin Conservation Department. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 17, T. 39 N., R. 16 W. Drilled unused water-table well in sand of Pleistocene age, diameter 8 inches, depth 46 feet. Land-surface datum is 980 feet above msl. Highest water level 31.57 below lsd, Sept. 10, 1951; lowest 34.99 below lsd, Mar. 25, 1951. Records available: 1937-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	34.79	Mar. 31	34.85	July 14	34.79	Oct. 13	34.54
6	34.79	Apr. 7	34.94	21	34.71	17	34.38
13	34.74	14	34.75	23	34.64	20	34.40
20	34.78	21	34.83	28	34.71	27	34.43
27	34.81	28	34.86	Aug. 1	34.73	30	34.35
31	34.85	30	34.79	4	34.75	31	34.36
Feb. 3	34.83	May 1	34.80	6	34.71	Nov. 1	34.39
10	34.85	5	34.84	11	34.69	10	34.25
17	34.89	12	34.89	18	34.64	15	34.03
24	34.88	19	34.93	Sept. 8	34.67	17	34.15
28	34.83	26	34.81	9	34.58	24	34.35
Mar. 1	34.81	31	34.83	10	31.57	30	34.34
3	34.66	June 1	34.87	11	33.30	Dec. 1	34.40
10	34.74	9	34.92	12	34.35	5	34.43
13	34.83	16	34.93	15	34.49	12	34.44
17	34.83	23	34.91	22	34.67	19	34.35
24	34.97	30	34.87	29	34.51	26	34.40
25	34.99	July 7	34.71	Oct. 6	34.49	30	34.41

Calumet County

Ca 4. Harold Krueger. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 12, T. 20 N., R. 19 E. Drilled stock water-table well in limestone and sandstone, diameter 12 inches, reported depth 518 feet, cased to 80. Land-surface datum is 845 feet above msl. Highest water level 24.96 below lsd, July 9, 1951; lowest 30.46 below lsd, Feb. 5, 1951. Records available: 1947-51. Feb. 5, 30.46; Apr. 11, 29.69; July 9, 24.96; Sept. 19, 25.50; Dec. 4, 25.87.

Ca 5. R. A. Huebner. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 17, T. 20 N., R. 20 E. Drilled domestic stock artesian well in limestone and sandstone, diameter 6 inches, reported depth 593 feet, cased to 327. Highest water level 96.49 below lsd, May 24, 1948; lowest 147.14 below lsd, Apr. 11, 1951. Records available: 1947-51. Apr. 11, 147.14; July 9, 107.50; Sept. 19, 117.91; Dec. 4, 116.90.

Columbia County

Co 13. F. Stollfus. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 13 N., R. 11 E. Drilled unused water-table well in sandstone, diameter 6 inches, depth 72 feet. Highest water level 56.28 below lsd, Aug. 28, 1951; lowest 58.38 below lsd, Jan. 25, 1951. Records available: 1949-51. Jan. 25, 58.38; Mar. 5, 58.23; July 12, 56.68; Aug. 28, 56.28; Oct. 31, 56.57.

Co 22. Wisconsin Fur and Game Farm. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 36, T. 11 N., R. 9 E. Drilled unused water-table well in sandstone, diameter 6 inches, depth 75 feet. Highest water level 52.83 below lsd, Sept. 30, 1949; lowest 55.82 below lsd, Mar. 5, 1951. Records available: 1949-51. Jan. 25, 55.51; Mar. 5, 55.82; May 3, 55.16; July 12, 53.59; Aug. 28, 53.28; Oct. 31, 53.44.

Co 23. H. Storanot. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 16, T. 10 N., R. 9 E. Drilled unused artesian well in sandstone, diameter 6 inches. Highest water level 141.17 below lsd, Feb. 23, 1950; lowest 144.25 below lsd, Jan. 10, 1950. Records available: 1949-51. Jan. 25, 142.49; Mar. 5, 143.24; Apr. 30, 142.72; July 10, 142.67; Aug. 28, 142.15; Oct. 31, 142.11.

Co 25. H. Landsverk. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 8, T. 11 N., R. 11 E. Drilled unused water-table well in sandstone, diameter 6 inches, depth 138 feet. Highest water level 74.56 below lsd, Oct. 31, 1951; lowest 82.28 below lsd, Dec. 9, 1949. Records available: 1949-51. Mar. 5, 80.64; May 3, 78.87; July 12, 74.87; Aug. 28, 74.64; Oct. 31, 74.56.

Co 28. Flanders. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 5, T. 12 N., R. 9 E. Drilled unused water-table well in sandstone, diameter 6 inches, depth 71 feet. Highest water level 0.13 below lsd, Apr. 25, 1951; lowest 2.66 below lsd, Feb. 6-7, 1950. Records available: 1949-51.

Co 28--Continued.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.21	2.15	0.89	0.58	0.34	0.58	1.04	1.12	1.20	1.12	...	...
2	2.21	2.16	.92	.58	.38	.38	1.10	1.15	1.22	1.12	...	...
3	2.20	2.17	.92	.59	.40	.32	1.10	1.22	1.28	1.13	...	...
4	2.18	2.19	.90	.62	.40	.35	...	1.26	1.32	1.02	...	...
5	2.18	2.19	.85	.63	.36	.41	...	1.26	1.33	.97	...	...
6	2.18	2.19	.67	.63	.40	.47	...	1.19	1.36	1.00	...	...
7	2.18	2.20	.61	.61	.43	.53	...	1.10	1.41	.99	...	...
8	2.17	2.22	.69	.44	.48	.57	...	1.11	1.44	.86	...	...
9	2.16	2.23	.77	.41	.52	.65	...	1.17	1.45	.92	...	...
10	2.16	2.23	.84	.44	.52	.73	.74	1.24	1.45	.95	...	...
11	2.16	2.23	.89	.45	.56	.80	.74	1.30	1.47	.97	...	...
12	2.17	2.13	.93	.42	.61	.85	.75	1.34	1.48	1.00	...	...
13	2.18	2.11	.97	.35	.64	.90	.82	1.34	1.32	1.02	...	...
14	2.18	2.11	1.00	.30	.68	.95	.92	1.05	1.34	1.04	...	...
15	2.18	2.11	.99	.35	.72	1.01	1.01	.83	1.31	1.06	...	...
16	2.17	2.10	.97	.38	.75	1.04	1.02	.68	1.30	1.06	...	...
17	2.15	2.04	.95	.40	.76	1.10	.78	.76	1.38	.87	...	...
18	2.13	2.00	.95	.42	.80	1.10	.78	.81	1.45	.75	...	...
19	2.13	1.92	.93	.46	.85	.77	.67	.82	1.51	.63	...	...
20	2.12	1.68	1.06	.47	.76	.65	.77	.82	1.55	.65	...	...
21	2.10	1.67	1.14	.47	.82	.68	.77	.90	1.59	.64	...	...
22	2.09	1.64	1.15	.36	.82	.69	.46	.98	1.59	.50	...	...
23	2.08	1.62	1.03	.40	.82	.77	.55	1.05	1.43	.52	...	...
24	2.10	1.62	1.10	.42	.90	.88	.64	1.10	1.45	.49	...	...
25	2.05	1.47	1.12	.31	.92	.92	.73	1.13	1.50	.45	...	...
26	2.07	1.08	1.07	.17	.90	.85	.81	1.13	1.51	.49	...	...
27	2.08	.85	.84	.19	.53	.74	.84	1.03	.98	.51	...	...
28	2.09	.82	.75	.23	.47	.78	.90	1.02	1.05	.55	...	...
29	2.11	.66	.22	.58	.88	.98	.98	1.06	1.08	.56	...	...
30	2.12	.54	.29	.66	.95	.99	1.10	1.12	.59	...	...	...
31	2.13	.57	.67	1.05	...	...	...	...	.61	...	...	...

Dane County

Dn 3. Gerald Hendrickson. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 32, T. 5 N., R. 8 E. Drilled unused well in St. Peter sandstone, diameter 6 inches, reported depth 100 feet. Land-surface datum is 930 feet above msl. Highest water level 55.26 below lsd, July 18, 1951; lowest 67.46 below lsd, Dec. 23, 1947. Records available: 1946-51. Feb. 13, 63.88; Apr. 18, 56.26; July 18, 55.26; Sept. 25, 58.36; Nov. 27, 57.13.

Dn 4. Joseph N. Hanley. Sun Prairie. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, T. 9 N., R. 11 E. Drilled unused well in St. Peter sandstone, diameter 6 inches, depth 70 feet. Land-surface datum is 966 feet above msl. Highest water level 33.57 below lsd, Apr. 26, 1951; lowest 50.04 below lsd, Mar. 29, 1950. Records available: 1946-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	46.85	47.61	45.85	39.38	34.75	36.30	37.90	39.43	40.80	41.89	42.22	41.18
2	46.85	47.64	46.09	39.38	35.17	36.30	37.97	39.35	40.84	41.80	42.31	41.16
3	46.85	47.63	45.76	39.30	35.15	36.41	37.97	39.60	40.94	41.95	42.09	41.08
4	47.06	47.72	44.90	38.59	35.20	36.53	38.16	39.65	40.96	42.05	42.27	41.19
5	47.17	47.76	44.89	37.97	35.19	36.54	38.26	39.63	40.90	42.26	42.40	41.17
6	47.09	47.68	43.27	38.06	35.32	36.50	38.26	39.50	41.00	42.29	42.32	41.06
7	47.02	47.68	38.81	37.91	35.28	36.46	38.12	39.58	41.16	42.26	42.04	41.38
8	47.01	47.88	41.73	37.35	35.13	36.49	38.22	39.67	41.09	42.30	42.06	41.45
9	47.10	47.92	42.72	37.18	35.26	36.60	38.29	39.78	40.98	42.38	42.06	41.34
10	47.20	47.84	43.29	36.91	35.23	36.67	38.43	39.86	40.99	42.38	42.16	41.29
11	47.20	47.67	43.42	37.18	35.14	36.66	38.44	39.95	41.08	42.36	42.16	41.08
12	47.27	47.96	43.25	37.12	35.41	36.73	38.49	40.03	41.20	42.47	41.91	41.26
13	47.23	48.14	42.71	37.22	35.49	36.90	38.54	40.01	41.24	42.48	41.80	41.39
14	47.08	48.16	44.88	37.21	35.53	36.99	38.56	40.04	41.38	42.41	41.64	41.34
15	47.25	48.03	42.71	37.08	35.53	36.91	38.55	40.00	41.43	42.45	41.57	41.44
16	47.27	47.80	42.23	37.15	35.48	36.95	38.70	40.05	41.44	42.59	41.96	41.43
17	47.21	47.90	42.18	37.14	35.55	37.03	38.74	40.09	41.42	42.65	42.01	41.38
18	47.28	47.90	41.94	36.90	35.55	37.10	38.69	40.17	41.44	42.66	41.89	41.37
19	47.33	47.99	41.60	37.05	35.53	37.10	38.77	40.18	41.47	42.70	41.87	41.36
20	47.60	47.97	41.61	37.08	35.55	37.29	38.84	40.13	41.45	42.52	41.75	41.01

## Dn 4--Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	47.66	48.04	41.56	36.91	35.64	37.32	38.84	40.33	41.61	42.42	41.45	41.23
22	47.48	48.09	41.44	36.85	35.74	37.34	38.98	40.42	41.64	42.68	41.49	41.40
23	47.36	48.13	41.21	36.89	35.82	37.40	39.02	40.49	41.68	42.68	41.52	41.58
24	47.49	48.02	41.29	36.81	35.73	37.66	39.02	40.47	41.72	42.52	41.60	41.69
25	47.54	47.85	41.22	36.69	35.68	37.68	39.04	40.42	41.80	42.53	41.49	41.53
26	47.50	46.15	41.18	34.28	35.62	37.54	39.07	40.39	41.68	42.45	41.50	.....
27	47.62	44.93	40.69	34.56	35.89	37.64	39.12	40.45	41.94	42.42	41.49	.....
28	47.71	44.91	39.70	35.20	36.06	37.71	39.20	40.55	42.09	42.27	41.32	41.32
29	47.76	.....	37.77	35.22	36.16	37.73	39.27	40.57	42.03	42.23	41.32	41.33
30	47.72	.....	37.97	.....	36.24	37.75	39.25	40.59	41.89	42.25	41.28	41.43
31	47.66	.....	38.61	.....	36.25	.....	39.35	40.75	.....	42.39	.....	41.43

Dn 5. State of Wisconsin. In south wing of State Capitol Bldg. Drilled unused artesian well in sandstone of Cambrian age, diameter 8 inches, reported depth 1,015 feet. Highest water level 86.10 below lsd, Oct. 1, 1951; lowest 105.28 below lsd, July 21, 1946. Records available: 1946-51. Jan. 25, 88.27; May 25, 87.40; July 25, 88.00; Oct. 1, 86.10; Dec. 12, 86.40.

## Dodge County

Dg 3. A. A. Corrigan. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 15, T. 13 N., R. 13 E. Drilled domestic artesian well in sandstone, diameter 6 inches, reported depth 170 feet. Land-surface datum is 909 feet above msl. Highest water level 2.80 below lsd, Apr. 13, 1951; lowest 13.49 below lsd, Oct. 13, 1948. Records available: 1946-51. Apr. 13, 2.80; July 11, 6.93; Sept. 21, 8.90.

Dg 4. City of Horicon. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 5, T. 11 N., R. 16 E. Drilled unused artesian well in sandstone, diameter 8 inches, reported depth 650 feet. Land-surface datum is 980 feet above msl. Highest water level 114.67 below lsd, May 17, 1948; lowest 121.68 below lsd, Sept. 27, 1950. Records available: 1947-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	119.31	118.52	116.18	117.00	117.09	119.04	120.73	119.05	119.58	119.39	.....
2	.....	119.23	118.16	116.72	117.15	117.02	119.25	121.23	118.98	119.60	.....	.....
3	119.24	119.78	118.46	116.84	116.55	117.08	119.20	120.62	118.48	119.83	.....	.....
4	119.92	119.03	118.00	117.32	116.50	117.28	119.38	120.32	119.13	119.86	.....	.....
5	119.46	119.12	118.39	117.22	116.47	117.30	119.72	120.00	119.13	119.89	.....	.....
6	119.50	119.54	117.77	117.97	116.87	117.33	119.75	119.84	119.38	120.01	.....	.....
7	119.40	119.15	117.79	117.07	116.56	117.45	119.32	119.53	119.95	119.70	.....	.....
8	119.81	119.78	118.51	116.94	116.58	117.50	119.25	120.00	120.03	119.58	.....	.....
9	119.68	.....	118.00	117.18	116.77	118.04	119.20	119.97	119.21	120.08	.....	.....
10	.....	118.52	116.73	117.28	117.91	119.74	119.73	119.13	120.16	.....	.....	.....
11	.....	.....	117.95	117.31	117.28	117.70	119.80	119.69	119.40	120.10	.....	118.39
12	.....	.....	118.21	116.51	116.88	117.70	119.79	119.72	119.41	119.72	.....	118.64
13	.....	.....	.....	117.60	116.70	116.67	118.36	120.35	119.33	119.45	120.10	118.99
14	.....	119.41	.....	116.45	117.22	118.08	120.11	119.35	120.18	119.71	118.48	118.95
15	.....	119.87	118.36	116.70	116.99	118.13	118.95	119.48	119.82	119.82	118.58	118.81
16	.....	119.20	117.68	116.56	117.51	118.08	119.62	119.42	119.80	119.89	118.98	118.09
17	.....	119.78	118.30	117.18	117.85	117.94	119.94	119.04	119.68	119.90	119.08	118.32
18	.....	119.18	117.68	116.56	117.16	117.95	119.94	118.98	120.18	119.83	118.50	118.51
19	.....	119.37	117.48	117.16	117.18	117.65	120.62	118.69	120.20	119.70	.....	118.85
20	.....	118.90	118.12	117.00	117.13	117.58	120.38	118.58	120.30	119.65	.....	118.40
21	.....	118.90	118.30	117.00	117.24	117.58	120.36	118.82	120.20	119.15	.....	118.07
22	.....	118.90	117.77	116.76	117.82	117.43	119.83	118.93	120.20	118.90	.....	117.65
23	.....	119.68	117.70	117.18	117.83	117.40	120.40	118.95	119.40	119.45	.....	117.76
24	.....	118.91	118.53	116.78	117.20	117.25	120.63	119.00	119.38	119.98	.....	117.95
25	120.03	119.15	117.80	116.88	117.17	117.90	120.90	118.99	119.70	119.02	.....	117.30
26	119.82	118.07	117.51	116.65	117.04	117.70	120.90	118.93	120.00	119.14	.....	.....
27	119.31	118.64	117.83	116.58	116.84	117.37	121.02	119.05	119.40	119.16	.....	117.45
28	119.52	118.08	117.07	116.95	117.00	117.88	121.12	118.60	119.84	118.97	.....	117.68
29	120.00	.....	116.40	116.47	.....	118.45	121.29	118.97	120.00	118.26	.....	117.73
30	119.43	.....	116.80	116.24	117.69	119.07	120.95	119.25	119.68	119.04	.....	117.23
31	119.80	.....	116.18	.....	117.09	.....	121.01	119.60	.....	119.29	.....	117.61

Dg 9. Ashippun Fire Department. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 30, T. 9 N., R. 17 E. Drilled unused water-table well, diameter 4 inches, reported depth 60 feet. Highest water level 5.66 below lsd, July 26, 1950; lowest 14.83 below lsd, Dec. 7, 1949. Records available: 1946-51. May 25, 7.53; July 25, 9.19; Oct. 8, 10.86; Dec. 12, 7.46.

Dg 10. Ashippun Fire Department.  $SE_1^4SE_1^4$  sec. 30, T. 9 N., R. 17 E. Drilled unused artesian well, diameter 6 inches, reported depth 200 feet. Land-surface datum is 868 feet above msl. Highest water level 8.09 below lsd, May 25, 1951; lowest 11.82 below lsd, Dec. 7, 1949. Records available 1946-51. Jan. 25, 10.64; May 25, 8.09; July 25, 8.88; Oct. 8, 9.80; Dec. 12, 8.62.

Dg 11. F. C. Etscheid.  $SE_1^4SW_1^4$  sec. 1, T. 9 N., R. 13 E. Drilled unused artesian well, diameter 6 inches, reported depth 1,880 feet. Highest water level 18.76 below lsd, Apr. 21, 1951; lowest 49.87 below lsd, Mar. 29-30, 1950. Records available: 1946-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	38.56	40.65	37.57	20.30	23.60	22.57	25.70	30.68	31.61	34.52	20.34	21.78
2	38.59	40.70	36.20	20.18	24.80	22.55	26.09	.....	31.68	34.47	20.09	21.92
3	38.46	40.70	34.21	19.97	24.80	22.28	26.34	.....	31.80	34.51	19.92	.....
4	38.76	40.76	32.95	19.87	24.10	22.37	26.59	.....	31.88	34.56	20.20	.....
5	38.77	40.84	31.33	19.88	22.83	22.50	26.51	.....	31.92	34.54	20.47	.....
6	38.91	40.84	29.47	19.79	21.80	23.07	26.39	31.86	32.14	34.37	20.49	.....
7	38.91	.....	27.44	19.65	21.15	23.51	26.65	31.89	32.26	34.05	20.81	.....
8	38.90	.....	25.53	19.51	20.67	23.65	27.06	31.75	32.19	33.89	21.01	.....
9	38.97	.....	24.46	19.37	20.53	23.77	27.06	31.82	32.18	33.67	21.22	.....
10	39.08	41.19	.....	19.22	20.61	24.01	27.04	32.16	32.13	33.41	21.63	.....
11	39.22	41.17	.....	19.17	20.85	24.20	27.12	32.51	32.14	33.02	21.69	22.29
12	39.33	41.38	.....	19.15	21.51	24.45	27.32	32.85	32.29	33.04	21.78	.....
13	39.36	41.66	.....	19.22	21.84	24.50	27.46	33.20	32.36	33.01	21.85	.....
14	39.36	41.74	.....	19.24	21.84	24.35	27.83	33.22	32.40	32.89	21.82	.....
15	39.54	41.71	.....	19.13	21.90	23.86	28.10	33.08	32.67	32.89	21.30	.....
16	.....	41.59	22.10	19.02	22.12	23.61	28.31	32.81	32.70	33.03	20.61	.....
17	.....	41.63	21.99	19.29	22.23	23.77	.....	32.52	32.66	33.07	19.95	.....
18	.....	41.63	21.84	19.16	22.23	24.00	.....	32.35	32.56	32.89	19.49	.....
19	.....	41.66	21.79	18.95	22.26	24.15	.....	32.28	32.75	32.54	19.31	.....
20	.....	41.68	.....	18.96	22.40	24.38	.....	32.13	32.78	32.09	19.23	.....
21	.....	41.64	.....	18.89	22.56	24.51	.....	31.75	33.30	31.84	19.38	.....
22	.....	41.62	.....	19.19	22.68	24.47	.....	31.70	33.64	31.51	19.54	.....
23	.....	41.51	.....	20.10	22.73	24.42	29.10	31.74	33.75	30.89	19.63	.....
24	40.25	42.29	.....	20.92	22.80	24.45	29.19	31.76	33.84	29.87	19.87	.....
25	40.30	41.06	.....	20.92	23.02	24.91	29.39	31.69	33.86	28.71	20.02	.....
26	40.31	40.86	.....	20.63	23.02	25.14	29.50	31.71	34.05	.....	20.39	.....
27	40.32	40.51	.....	19.30	.....	25.27	29.83	31.76	34.35	.....	20.43	.....
28	40.46	38.51	21.28	20.36	.....	25.23	29.93	31.75	34.40	.....	20.76	.....
29	40.64	.....	20.99	20.95	.....	25.41	30.01	31.48	34.40	.....	21.23	.....
30	40.65	.....	20.69	21.60	22.55	25.70	30.03	31.41	34.45	.....	21.47	.....
31	40.60	.....	20.53	.....	22.53	.....	30.38	31.53	.....	20.68	.....	.....

Dg 12. Baker Canning Co.  $NW_1^4SE_1^4$  sec. 10, T. 12 N., R. 17 E. Drilled industrial artesian well in sandstone, diameter 10 to 8 inches, reported depth 955 feet, cased to 353. Land-surface datum is 956 feet above msl. Highest water level 38.41 below lsd, May 3, 1948; lowest 75.80 below lsd, July 26, 1950. Records available: 1946-51. Jan. 25, 72.74; May 25, 63.37; Oct. 1, 70.57; Dec. 12, 69.85.

Dg 14. Chicago & North Western Railway.  $NE_1^4NE_1^4$  sec. 21, T. 10 N., R. 15 E. Drilled railroad artesian well in sandstone, diameter 12 inches, reported depth 700 feet, cased to 0-276, 388-430. Land-surface datum is 883 feet above msl. Highest water level 43.78 below lsd, Jan. 25, 1951; lowest 54.20 below lsd, Sept. 12, 1946. Records available: 1946-51. Jan. 25, 43.78; May 15, 48.06; July 25, 52.68; Oct. 1, 52.68; Dec. 12, 38.82.

Dg 15. Mayville Construction Co.  $SW_1^4NW_1^4$  sec. 13, T. 12 N., R. 16 E. Drilled unused well in sandstone, diameter 12 inches, reported depth 1,083 feet, cased to 232. Land-surface datum is 924 feet above msl. Highest water level 15.76 below lsd, May 25, 1951; lowest 25.99 below lsd, Dec. 18, 1946. Records available: 1946-51. May 25, 15.76; July 25, 17.34; Oct. 1, 17.92; Dec. 12, 16.59.

Dg 17. F. C. Etscheid.  $SE_1^4SW_1^4$  sec. 1, T. 9 N., R. 13 E. Dug domestic stock water-table well in deposits of Pleistocene age, diameter 4 feet, reported depth 90 feet. Highest water level 3.61 below lsd, Mar. 15, 1951; lowest 86.12 below lsd, Nov. 2, 1949. Records available: 1948-51.

## Dg 17--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	60.73	Apr. 17	4.40	Aug. 13	54.99	Oct. 15	46.48
18	64.38	May 8	9.66	27	41.52	22	39.62
23	65.90	21	19.02	Sept. 3	40.81	30	5.60
30	66.18	June 19	27.35	10	42.77	Nov. 6	12.03
Feb. 6	68.57	July 2	36.40	17	43.82	13	20.77
20	72.32	9	34.53	24	48.93	20	11.17
Mar. 15	3.61	16	40.63	Oct. 1	53.24	26	15.58
20	3.95	30	45.33	8	50.95	Dec. 3	27.91
Apr. 12	3.17	Aug. 6	51.68				

Door County

Dr 5. City of Sturgeon Bay.  $NE\frac{1}{4}NW\frac{1}{4}$  sec. 8, T. 27 N., R. 26 E. Drilled municipal artesian well in Niagara dolomite and St. Peter sandstone, diameter 12 inches, reported depth 1,169 feet, cased to 69. Land-surface datum is 582 feet above msl. Highest water level 2.40 above lsd, Apr. 12, 1951; lowest 9.51 below lsd, Aug. 13, 1948. Records available: 1946-51. Feb. 6, -8.35; Apr. 12, +2.40; July 10, -2.82; Sept. 19, -4.92; Dec. 5, +0.68.

Dr 7. Fred Peterson.  $NE\frac{1}{4}NE\frac{1}{4}$  sec. 30, T. 29 N., R. 27 E. Drilled unused artesian well in Niagara dolomite, diameter 4 inches, depth 111 feet. Highest water level 12.18 below lsd, Mar. 24, 1947; lowest 52.40 below lsd, Dec. 7, 1949. Records available: 1946-51. Feb. 6, 46.02; Apr. 12, 19.05; July 9, 12.66; Sept. 19, 46.11; Dec. 5, 32.28.

Dr 11. Charles Telesphere.  $SW\frac{1}{4}SW\frac{1}{4}$  sec. 22, T. 26 N., R. 23 E. Drilled stock artesian well in sandstone and Niagara dolomite, diameter 6 inches, reported depth 816 feet, cased to 60. Land-surface datum is 630 feet above msl. Highest water level 42.16 below lsd, Sept. 20, 1950; lowest 46.60 below lsd, Aug. 1, 1950. Records available: 1950-51. Feb. 6, 42.38; Apr. 12, 43.44; July 10, 44.39; Sept. 19, 44.80; Dec. 5, 45.34.

Dr 12. William Destree.  $SW\frac{1}{4}NE\frac{1}{4}$  sec. 19, T. 27 N., R. 24 E. Drilled domestic stock artesian well in sandstone and Niagara dolomite, diameter 6 inches, reported depth 740 feet. Land-surface datum is 648 feet above msl. Highest water level 18.57 below lsd, Dec. 5, 1951; lowest 49.68 below lsd, Feb. 6, 1951. Records available: 1950-51. Feb. 6, 49.68; July 10, 32.10; Sept. 19, 35.19; Dec. 5, 18.57.

Douglas County

Ds 1. Wisconsin Conservation Department.  $NE\frac{1}{4}SE\frac{1}{4}$  sec. 23, T. 47 N., R. 10 W. Drilled artesian well in sand, diameter 8 inches, depth 40 feet, cased to 40. Land-surface datum is 980 feet above msl. Highest water level 26.31 below lsd, Mar. 17, 1945; lowest 29.47 below lsd, Dec. 21, 1941. Records available: 1937-41, 1944-51.

Jan.	6	28.48	Apr.	6	28.22	July	6	28.07	Oct.	12	27.33
	13	28.47		13	26.68		13	28.07		19	27.29
	20	28.45		20	26.74		20	27.99		26	26.28
	27	28.46		27	28.48		Aug. 3	27.90		Nov. 3	27.26
Feb. 2	28.46		May 4	28.48			10	27.85		10	27.20
	9	28.47		12	28.46		17	27.81		17	27.19
	16	28.48		18	28.45		24	27.75		24	27.20
	23	28.49		25	28.39		31	27.66		30	27.21
Mar. 2	28.49		June 4	28.31		Sept. 9	27.57		Dec. 7	26.98	
	12	28.48		8	28.31		14	27.23		14	26.94
	18	28.48		15	28.30		21	27.37		21	26.84
	26	28.48		22	28.19		28	27.43		28	26.80
	30	28.05		29	28.11		Oct. 5	27.40			

Eau Claire County

EC 13. Eau Claire County.  $SW\frac{1}{4}SW\frac{1}{4}$  sec. 32, T. 26 N., R. 6 W. Driven unused water-table well in alluvium, diameter  $1\frac{1}{4}$  inches, depth 26 feet. Highest water level 13.22 below lsd, Aug. 14, 1951; lowest 14.98 below lsd, Nov. 29, 1951. Records available: 1951. Aug. 14, 13.22; Sept. 27, 13.65; Nov. 29, 14.98.

Fond du Lac County

FL 10. City of Fond du Lac. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 11, T. 15 N., R. 17 E. Drilled unused artesian well in St. Peter sandstone and sandstone of Cambrian age, diameter 6 inches, reported depth 595 feet, cased to 143. Land-surface datum is 765 feet above msl. Highest water level 43.65 below lsd, July 30, 1946; lowest 58.03 below lsd, Aug. 27, 1948. Records available: 1946-51. Feb. 5, 53.97; Apr. 11, 53.40; July 9, 55.12; Dec. 4, 51.39.

FL 19. John Steffin. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 30, T. 17 N., R. 19 E. Drilled stock artesian well in sandstone, diameter 6 to 4 inches, reported depth 695 feet, cased to 590. Land-surface datum is 895 feet above msl. Highest water level 132.75 below lsd, Jan. 8, 1948; lowest 138.82 below lsd, Sept. 19, 1951. Records available: 1948-51. Feb. 5, 138.12; Apr. 11, 137.81; July 9, 137.99; Sept. 19, 138.82; Dec. 4, 138.28.

FL 20. City of Fond du Lac. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 3, T. 15 N., R. 17 E. Drilled unused artesian well in sandstone, diameter 6 inches, reported depth 700 feet. Highest water level 62.39 below lsd, Dec. 28, 1951; lowest 81.37 below lsd, July 12, 1950. Records available: 1950-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	70.75	.....	71.18	.....	67.55	70.86	.....	70.39	68.40	65.61	65.59	.....
2	70.70	.....	71.13	.....	67.64	70.65	.....	70.77	67.73	65.64	65.15	.....
3	70.54	.....	70.77	.....	67.85	70.29	.....	71.16	67.87	66.57	64.50	.....
4	70.81	.....	70.80	.....	67.90	70.40	.....	71.09	67.70	66.40	64.61	.....
5	70.85	70.73	70.75	.....	68.04	70.36	.....	70.65	67.31	66.11	64.52	63.21
6	70.79	70.50	.....	.....	67.98	70.45	.....	70.16	67.40	65.85	64.33	63.21
7	70.48	70.87	.....	.....	67.90	70.45	.....	70.16	67.40	65.31	65.19	63.86
8	70.35	70.77	.....	.....	67.95	70.60	.....	70.02	67.44	64.96	64.70	63.80
9	70.21	70.88	.....	.....	68.10	70.75	69.85	70.15	67.81	64.81	64.67	63.37
10	70.28	70.75	.....	.....	67.95	70.55	69.72	70.00	67.20	64.54	62.99	.....
11	70.38	70.33	.....	68.77	67.90	70.90	69.85	69.94	67.37	64.43	63.04	.....
12	70.59	70.80	.....	68.77	68.29	.....	69.60	69.92	65.39	64.06	63.13	.....
13	70.36	70.93	.....	68.80	68.16	.....	69.38	69.47	64.97	64.11	63.24	.....
14	69.95	71.05	.....	68.68	68.30	.....	69.27	69.82	64.97	64.46	63.07	.....
15	69.96	70.95	.....	68.65	68.54	.....	69.05	69.75	64.27	64.66	62.93	.....
16	69.96	70.85	.....	68.50	69.39	.....	69.15	69.50	64.71	64.35	63.11	.....
17	69.96	71.00	.....	68.45	69.75	.....	69.10	69.25	64.97	64.08	62.96	.....
18	70.36	70.85	.....	68.65	69.73	.....	68.85	69.07	65.31	64.03	63.16	.....
19	70.58	71.14	.....	68.77	69.75	.....	69.05	68.76	65.12	65.12	63.05	.....
20	70.46	71.09	.....	68.77	70.15	.....	69.02	68.82	67.50	65.28	62.80	.....
21	70.61	71.29	.....	68.50	70.49	.....	69.40	68.95	67.46	64.93	63.20	.....
22	.....	71.22	.....	68.25	70.37	.....	69.33	68.97	65.19	63.20	.....	.....
23	.....	71.25	.....	68.32	70.57	.....	68.95	68.40	66.37	65.37	63.17	.....
24	.....	70.90	.....	68.15	70.75	.....	69.00	68.42	66.43	65.41	63.50	.....
25	.....	70.55	.....	68.00	71.00	.....	69.05	68.00	66.12	65.19	63.41	.....
26	.....	70.88	.....	68.02	71.02	.....	69.90	67.87	66.38	65.20	63.38	.....
27	.....	71.30	.....	67.88	71.09	.....	70.55	67.80	66.85	65.47	63.27	.....
28	.....	71.16	.....	67.48	71.14	.....	70.43	67.92	66.65	65.63	62.88	.....
29	.....	.....	.....	67.63	71.15	.....	70.32	68.07	66.08	65.58	63.20	.....
30	.....	.....	.....	67.67	71.08	.....	69.95	68.00	65.70	65.46	63.19	.....
31	.....	.....	.....	.....	70.86	.....	70.23	68.50	65.44	63.00	.....	.....

FL 21. Wisconsin Central Railroad. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 33, T. 16 N., R. 17 E. Drilled industrial artesian well in limestone of Ordovician age, diameter 8 inches, reported depth 450 feet. Highest water level 29.00 below lsd, Dec. 4, 1951; lowest 34.24 below lsd, Feb. 5, 1951. Records available: 1950-51. Feb. 5, 34.24; Apr. 11, 30.98; July 9, 32.14; Sept. 18, 31.54; Dec. 4, 29.00.

Forest County

Fr 1. Wisconsin State Highway Department. W.M.P. No. 4. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 18, T. 41 N., R. 14 E. Driven observation water-table well in sand, diameter 1 $\frac{1}{4}$  inches, depth 9 feet, screen 6-9. Land-surface datum is 1,547.86 feet above msl. Highest water level 5.38 below lsd, Apr. 18, 1951; lowest 8.10 below lsd, June 13, 1949. Records available: 1948-51.

## Fr 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 29, 1948	8.07	July 14, 1949	7.34	May 15, 1950	5.64	Mar. 13, 1951	6.62
Nov. 15	8.07	Aug. 16	8.03	June 16	7.85	Apr. 18	5.88
Dec. 16	7.62	Sept. 14	7.42	July 13	7.77	May 3	5.66
Jan. 14, 1949	7.52	Oct. 17	7.63	Aug. 15	7.77	June 1	7.00
Feb. 15	7.08	Nov. 14	7.46	Sept. 8	8.06	July 3	6.77
Mar. 15	7.28	Dec. 15	7.31	Oct. 13	8.09	Aug. 1	7.88
30	6.96	Jan. 17, 1950	7.05	Nov. 15	7.80	30	7.67
Apr. 18	7.42	Feb. 13	6.76	Dec. 13	7.31	Sept. 27	6.95
May 16	7.40	Mar. 14	6.70	Jan. 12, 1951	7.16	Oct. 30	7.15
June 13	8.10	Apr. 13	6.66	Feb. 15	6.70	Nov. 29	7.23

Fr 2. Wisconsin State Highway Department. W. M. P. No. 5. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 18, T. 41 N., R. 14 E. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 18 feet, screened 15-18. Land-surface datum is 1,551.69 feet above msl. Highest water level 8.76 below lsd, May 15, 1950; lowest 11.88 below lsd, May 16, 1949. Records available: 1948-51.

Oct. 29, 1948	11.80	July 14, 1949	11.79	May 15, 1950	8.76	Mar. 13, 1951	10.26
Nov. 15	11.76	Aug. 16	11.61	June 16	10.59	Apr. 18	8.79
Dec. 16	11.22	Sept. 14	11.11	July 13	11.20	May 3	8.84
Jan. 14, 1949	10.97	Oct. 17	11.26	Aug. 15	11.42	June 1	10.29
Feb. 15	10.78	Nov. 14	11.22	Sept. 8	11.68	July 3	10.14
Mar. 15	10.88	Dec. 15	11.06	Oct. 13	11.68	Aug. 1	10.78
30	10.72	Jan. 17, 1950	10.78	Nov. 15	11.42	30	11.16
Apr. 18	10.93	Feb. 13	10.40	Dec. 13	10.97	Sept. 27	10.71
May 16	11.88	Mar. 14	10.41	Jan. 12, 1951	10.79	Oct. 30	10.68
June 13	11.61	Apr. 13	10.34	Feb. 15	10.53	Nov. 29	10.61

Fr 3. Wisconsin State Highway Department. W. M. P. No. 6. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 18, T. 41 N., R. 14 E. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 15 feet, screen 12-15. Land-surface datum is 1,548.38 feet above msl. Highest water level 5.10 below lsd, May 15, 1950; lowest 9.13 below lsd, Oct. 29, 1948. Records available: 1948-51.

Oct. 29, 1948	9.13	July 14, 1949	7.54	May 15, 1950	5.10	Mar. 13, 1951	6.94
Nov. 15	8.38	Aug. 16	8.21	June 16	7.07	Apr. 18	5.26
Dec. 16	7.88	Sept. 14	7.71	July 13	7.74	May 3	5.30
Jan. 14, 1949	7.80	Oct. 17	7.83	Aug. 15	7.98	June 1	6.84
Feb. 15	7.38	Nov. 14	7.50	Sept. 8	8.19	July 3	6.71
Mar. 15	7.41	Dec. 15	7.64	Oct. 13	8.29	Aug. 1	7.34
30	7.31	Jan. 17, 1950	7.41	Nov. 15	8.06	30	7.75
Apr. 18	7.53	Feb. 13	7.02	Dec. 13	7.63	Sept. 27	7.36
May 16	7.43	Mar. 14	6.88	Jan. 12, 1951	7.49	Oct. 30	7.12
June 13	8.10	Apr. 13	6.98	Feb. 15	7.27	Nov. 29	7.22

Fr 4. Wisconsin State Highway Department. W. M. P. No. 7. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 18, T. 41 N., R. 14 E. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 17 feet, screen 14-17. Land-surface datum is 1,549.38 feet above msl. Highest water level 6.37 below lsd, May 3, 1951; lowest 8.57 below lsd, Aug. 30, 1951. Records available: 1951.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	8.18	Apr. 18	6.44	July 3	7.05	Sept. 27	7.99
Feb. 15	7.90	May 3	6.37	Aug. 1	8.21	Oct. 30	8.04
Mar. 13	7.74	June 1	7.73	30	8.57	Nov. 29	8.05

Grant County

Gr 4. Henry Jones Estate. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 26, T. 6 N., R. 1 W. Drilled unused water-table well in limestone, diameter 6 inches, depth 165 feet. Land-surface datum is 1,160 feet above msl. Highest water level 60.67 below lsd, Nov. 27, 1951; lowest 67.89 below lsd, Apr. 3, 1950. Records available: 1946-51. Apr. 18, 66.71; July 18, 62.95; Sept. 25, 62.24; Nov. 27, 60.67.

Gr 5. Clarence Gratz. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 6, T. 5 N., R. 2 W. Drilled unused water-table well in limestone, diameter 5 inches, depth 35 feet. Highest water level 8.90 below lsd, July 16, 1947; lowest 17.33 below lsd, Feb. 28, 1950. Records available: 1946-51. Feb. 13, 15.19; Apr. 18, 10.79; July 18, 10.41; Sept. 25, 11.70; Nov. 27, 10.78.

Green County

Gn 1. Charles Segner. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, T. 2 N., R. 7 E. Drilled unused well in Platteville limestone, diameter 6 inches, depth 71 feet. Highest water level 50.33 below lsd, May 20, 1948; lowest 64.70 below lsd, Jan. 22, 1948. Records available: 1946-51. Feb. 13, 63.02; Apr. 18, 52.74; July 18, 52.52; Sept. 25, 57.55; Nov. 27, 53.36.

Gn 2. Earl Waddington. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 18, T. 3 N., R. 6 E. Drilled unused artesian well in sandstone and limestone, diameter 6 inches. Highest water level 130.64 below lsd, Nov. 27, 1951; lowest 136.30 below lsd, Mar. 19, 1947. Records available: 1946-51. Feb. 13, 135.50; Apr. 18, 134.79; July 18, 134.11; Sept. 25, 132.07; Nov. 27, 130.64.

Gn 3. John Waelti, Jr. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 23, T. 2 N., R. 7 E. Drilled unused limestone well, diameter .6 inches, depth 103 feet. Highest water level 28.11 below lsd, July 18, 1951; lowest 34.53 below lsd, Feb. 13, 1951. Records available: 1947-51. Feb. 13, 34.53; Apr. 18, 28.94; July 18, 28.11; Sept. 25, 30.67; Nov. 27, 28.14.

Jackson County

Ja 1. L. Epstein. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 20, T. 20 N., R. 2 W. Drilled domestic water-table well in sandstone, diameter 6 inches, reported depth 140 feet. Highest water level 7.00 below lsd, Sept. 27, 1951; lowest 18.51 below lsd, Oct. 5, 1950. Records available: 1947-51. Feb. 15, 16.75; Apr. 20, 15.15; July 20 16.77; Sept. 27, 7.00.

Jefferson County

Je 1. Edmond and James Long. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 3, T. 6 N., R. 13 E. Driven unused water-table well in deposits of Pleistocene age, diameter 1 $\frac{1}{2}$  inches, depth 12 ft., cased to 12. Corrected measurements for 1948-49 are given below. Highest water level above lsd, June 6, 1951; lowest 5.00 below lsd, Nov. 29, 1949. Records available: 1946-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7, 1948	3.36	July 29, 1948	3.10	Jan. 3, 1949	3.85	Nov. 29, 1949	5.00
Feb. 11	4.00	Aug. 25	3.76	May 2	2.36	May 16, 1951	.82
May 5	1.81	Sept. 22	4.18	June 6	3.46	July 31	.89
June 2	2.31	Oct. 20	4.16	July 25	3.91	Nov. 21	.76
22	2.98	Nov. 24	3.30	Sept. 19	4.73		

Je 9. Chicago & North Western Railway. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 25, T. 7 N., R. 14 E. Drilled railroad artesian well in sandstone, diameter 8 inches, reported depth 716 feet, cased to 326. Land-surface datum is 813 feet above msl. Highest water level 15.16 below lsd, Feb. 28, 1949; lowest 34.60 below lsd, Sept. 19, 1949. Records available: 1946-51. July 31, 18.65; Sept. 27, 23.14; Nov. 21, 18.15.

Juneau County

Ju 8. Camp Douglas. Formerly Wisconsin National Guard, Camp Williams. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 17 N., R. 2 E. Drilled unused well in sandstone, diameter 4 inches, depth 64 feet. Highest water level 4.97 below lsd, June 5, 1951; lowest 9.80 below lsd, Mar. 3, 1950. Records available: 1949-51.

Daily lowest water level from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.60	8.94	8.63	7.25	5.28	5.39	....	5.28	5.98	6.34	5.59	5.74
2	8.63	8.95	8.58	7.18	5.27	5.24	5.26	5.29	5.96	6.38	5.60	5.75
3	8.63	8.96	8.51	7.12	5.26	5.03	5.27	5.35	5.97	6.38	5.60	5.77
4	8.64	8.97	8.47	7.06	5.40	4.99	5.25	5.39	5.98	5.80	5.64	5.78
5	8.65	8.98	8.46	6.96	5.29	4.98	5.29	....	5.99	5.64	5.71	....
6	8.66	8.99	8.44	6.89	5.24	5.04	5.40	5.50	6.04	....	5.79	5.81
7	8.67	8.99	8.39	6.81	5.24	5.00	5.36	5.47	6.06	5.60	5.79	....
8	8.69	9.05	8.33	6.67	5.23	5.00	5.33	5.43	6.06	5.60	5.78	5.88
9	8.69	9.05	8.29	6.55	5.25	5.03	5.16	5.55	6.07	5.64	5.79	5.90
10	8.70	9.05	8.26	6.45	5.26	5.06	5.14	5.55	6.06	....	5.81	....
11	8.71	9.05	8.24	6.37	5.46	5.14	5.15	5.55	6.20	5.64	5.82	5.95
12	8.71	9.05	8.20	6.27	5.32	5.14	5.16	5.69	6.16	....	5.82	....
13	8.72	9.09	8.21	6.15	5.34	5.17	5.25	5.73	6.19	5.69	5.75	....
14	8.73	9.09	8.18	6.04	5.35	5.20	5.24	5.71	6.18	5.70	5.58	....
15	8.76	9.09	8.17	5.95	5.36	5.20	5.26	5.66	6.16	5.75	5.58	....
16	8.76	9.09	8.16	5.94	5.36	5.22	5.32	5.69	6.16	5.78	5.58	6.04
17	8.76	9.09	8.16	5.88	5.53	5.25	5.27	5.71	6.20	5.81	5.57	6.05
18	8.77	9.10	8.14	5.82	5.47	5.45	5.22	5.74	6.20	....	5.55	6.09
19	8.78	9.10	8.13	5.80	5.42	5.35	5.15	5.73	6.20	....	5.58	6.10
20	8.79	9.13	8.13	5.84	5.43	5.27	5.14	5.72	6.21	....	....	....

## Ju 8--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	8.80	9.13	8.13	5.82	5.62	5.31	5.12	5.79	6.23	5.74	5.53	6.10
22	8.83	9.13	8.12	5.73	5.53	5.46	4.99	5.87	6.24	5.86	5.55	6.13
23	....	9.13	8.10	5.71	5.52	5.48	5.05	5.88	6.25	5.61	5.58	6.16
24	....	9.13	8.15	5.69	5.51	5.53	5.00	5.89	6.31	5.50	5.62	6.22
25	....	9.12	8.14	5.63	5.51	5.66	5.10	5.90	6.31	5.47	5.63	6.22
26	....	9.05	8.14	5.50	5.51	5.58	5.07	5.83	6.28	5.47	5.73	....
27	....	8.89	8.17	5.42	5.48	5.34	5.08	5.92	6.31	5.47	5.73	6.21
28	....	8.76	8.07	5.33	5.40	5.28	5.11	5.88	6.32	5.46	5.72	6.21
29	....	....	7.82	5.30	5.40	5.29	5.15	5.87	6.33	5.47	5.72	6.23
30	....	....	7.52	5.29	5.41	....	5.33	5.87	6.34	5.52	5.73	6.26
31	....	....	7.36	....	5.41	....	5.26	6.02	....	5.57	....	6.30

Kenosha County

Ke 3. Bristol Sales and Service. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 8, T. 1 N., R. 21 E. Drilled domestic well in limestone, diameter 8 inches, reported depth 692 feet. Land-surface datum is 765 feet above msl. Highest water level 95.80 below lsd, Dec. 3, 1947; lowest 114.25 below lsd, Jan. 3, 1949. Records available: 1946-51. Jan. 23, 109.42; May 21, 111.07; July 24, 112.85; Oct. 3, 110.88; Dec. 11, 109.03.

Ke 4. Sunset Ridge Memorial Park. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 27, T. 2 N., R. 22 E. Drilled domestic and irrigation water-table well, diameter 6 inches, reported depth 190 feet. Land-surface datum is 725 feet above msl. Highest water level 73.82 below lsd, June 24, 1946; lowest 78.91 below lsd, Sept. 19, 1949. Records available: 1946-51. Jan. 23, 76.03; May 21, 75.98; July 24, 75.88; Oct. 3, 76.02; Dec. 11, 74.52.

Ke 5. J. Bishop. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 20, T. 2 N., R. 22 E. Dug unused water-table well in deposits of Pleistocene age, diameter 4 feet, depth 28 feet. Land-surface datum is 695 feet above msl. Highest water level 0.41 below lsd, May 10, 1948; lowest 9.86 below lsd, Sept. 1, 1948. Records available: 1946-51. Jan. 23, 3.47; May 21, 2.54; July 24, 3.93; Oct. 3, 4.08; Dec. 11, 2.82.

Ke 6. Kenosha County. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 2 N., R. 22 E. Drilled irrigation artesian well in sandstone, diameter 10 inches, reported depth 1,751 feet, cased to 492. Land-surface datum is 630 feet above msl. Highest water level 21.10 below lsd, Dec. 3, 1947; lowest 38.45 below lsd, Dec. 11, 1951. Records available: 1946-51. Jan. 23, 36.17; May 21, 37.00; July 24, 37.39; Oct. 3, 37.89; Dec. 11, 38.45.

Lafayette County

Lf 1. Erickson. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 25, T. 3 N., R. 5 E. Drilled unused water-table well in limestone, diameter 6 inches, depth 55 feet. Land-surface datum is 820 feet above msl. Highest water level 16.0 below lsd, June 15, 1947; lowest 23.0 below lsd, Nov. 4, 1947. Records available: 1946-51. Feb. 13, 22.75; Apr. 18, 19.57; July 18, 19.27; Sept. 25, 20.75; Nov. 27, 20.12.

Lf 10. Wallace Wedig. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 2 N., R. 1 E. Drilled unused water-table well in limestone, diameter 6 inches. Highest water level 15.20 below lsd, June 16, 1947; lowest 26.46 below lsd, Feb. 13, 1951. Records available: 1947-51. Feb. 13, 26.46; Apr. 18, 21.51; July 18, 19.09; Sept. 25, 21.22; Nov. 27, 20.06.

Lf 11. Ed. Wiegel. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 4, T. 2 N., R. 1 E. Drilled unused water-table well in limestone, diameter 6 inches. Highest water level 23.40 below lsd, July 16, 1947; lowest 34.20 below lsd, Feb. 13, 1951. Records available: 1947-51. Feb. 13, 34.20; Apr. 18, 32.70; July 18, 27.80; Sept. 25, 28.43; Nov. 27, 29.21.

Lf 12. Pearl Ogelthre and others. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 33, T. 2 N., R. 4 E. Drilled unused water-table well, diameter 6 inches. Highest water level 20.17 below lsd, June 16, 1947; lowest 38.20 below lsd, Dec. 13, 1949. Records available: 1947-51. Apr. 18, 25.02; July 18, 25.99; Sept. 25, 32.95; Nov. 27, 26.58.

Lf 13. F. Viola Jeffery. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, T. 1 N., R. 2 E. Drilled stock observation water-table well in limestone, diameter 6 inches, reported depth 175 feet. Highest water level 7.46 below lsd, Nov. 27, 1951; lowest 14.65 below lsd, Sept. 25, 1951. Records available: 1951. Aug. 6, 11.25; Sept. 25, 14.65; Nov. 27, 7.46.

Lf 14. F. Viola Jeffery. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, T. 1 N., R. 2 E. Drilled well in Platteville limestone, diameter 6 inches, reported depth 340 feet, cased to 77. Records available: 1951. Aug. 6, 129.25.

Langlade County

La 2. Dahlke. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 25, T. 31 N., R. 11 E. Drilled unused water-table well, diameter 4 inches, depth 128 feet. Land-surface datum is 1,594 feet above msl. Highest water level 118.51 below lsd, Mar. 6, 1951; lowest dry, Dec. 10, 1949. Records available: 1948-51. Jan. 16, 121.73; Mar. 6, 118.51; measurement discontinued.

La 3. James Veelak. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 4, T. 31 N., R. 12 E. Drilled unused water-table well, diameter 4 inches, depth 83 feet. Land-surface datum is 1,599.84 feet above msl. Highest water level 80.10 below lsd, May 6, 1948; lowest 82.47 below lsd, Aug. 25, 1949. Records available: 1948-49, 1951. Aug. 29, 81.88; measurement discontinued.

La 9. U. S. Geol. Survey. Formerly Harvey Guenther. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 31 N., R. 10 E. Driven unused water-table well in sand, diameter 1 $\frac{1}{4}$  inches, depth 19 feet, cased to 19, well point. Land-surface datum is 1,470.06 feet above msl. Highest water level 13.56 below lsd, July 10, 1951; lowest 15.15 below lsd, Mar. 5, 1951. Records available: 1948-51. Jan. 16, 14.83; Mar. 5, 15.15; May 2, 13.17; May 23, 13.37; July 10, 13.56; Aug. 29, 13.78; Oct. 15, 13.78.

La 26. U. S. Geol. Survey. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 7, T. 31 N., R. 11 E. Driven unused well in sand, diameter 1 $\frac{1}{4}$  inches, depth 23 feet, cased to 23. Land-surface datum is 1,522.66 feet above msl. Highest water level 3.42 below lsd, June 2, 1945; lowest 10.79 below lsd, Jan. 7, 1951. Records available: 1944-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	10.79	Apr. 9	6.01	July 12	6.59	Oct. 9	7.29
13	10.07	13	5.82	17	7.0	17	7.44
20	10.07	22	5.88	24	6.88	23	7.0
29	10.18	30	6.09	31	7.0	31	7.02
Feb. 4	10.21	May 6	6.16	Aug. 7	7.38	Nov. 7	7.02
10	10.24	15	6.36	14	7.34	13	6.69
18	10.33	20	6.38	21	7.50	20	6.55
25	10.38	28	6.58	28	7.60	27	5.97
Mar. 4	10.02	June 5	6.51	Sept. 4	7.40	Dec. 4	6.35
11	10.01	12	6.74	12	7.30	12	6.13
18	10.05	19	6.86	18	7.39	19	6.39
26	10.18	26	6.90	25	7.90	26	6.67
Apr. 1	8.12	July 3	6.90	30	7.75		

La 44. J. Jacobus. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 32, T. 32 N., R. 11 E. Driven unused water-table well in sand, diameter 1 $\frac{1}{4}$  inches, depth 26 feet. Land-surface datum is 1,584.34 feet above msl. Highest water level 22.39 below lsd, Oct. 15, 1951; lowest 24.07 below lsd, Mar. 22, 1950. Records available: 1948-51. Jan. 16, 23.18; May 2, 22.77; May 23, 22.69; July 11, 22.46; Aug. 29, 22.41; Oct. 15, 22.39.

La 64. Wisconsin Conservation Department. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 20, T. 31 N., R. 11 E. Driven unused water-table well in sand, diameter 2 inches, reported depth 20 feet. Land-surface datum is 1,507.93 feet above msl. Highest water level 13.26 below lsd, Aug. 23, 1951; lowest 16.46 below lsd, Jan. 31, 1949. Records available: 1948-51.

Jan. 8	16.13	Apr. 9	14.01	July 9	14.05	Oct. 8	14.44
15	16.22	16	13.32	16	14.11	15	14.79
22	16.34	23	13.26	23	14.21	22	14.40
29	16.31	30	13.29	30	14.24	29	14.29
Feb. 5	16.34	May 7	13.37	Aug. 6	14.41	Nov. 5	14.57
12	16.38	14	13.52	13	14.52	12	14.53
19	16.42	21	13.60	20	14.60	19	14.50
26	16.41	28	13.72	27	14.68	26	14.48
Mar. 5	16.18	June 4	13.82	Sept. 1	14.51	Dec. 3	14.16
12	16.10	11	13.91	10	14.53	10	14.12
19	16.08	18	14.03	17	14.44	17	14.10
26	16.10	25	14.14	24	14.42	24	14.20
Apr. 2	15.28	July 2	14.21	Oct. 1	14.50	31	14.20

La 71. Fred Anstutz. SW<sub>4</sub><sup>1</sup>NW<sub>4</sub><sup>1</sup> sec. 6, T. 31 N., R. 10 E. Dug and driven unused water-table well in sand, diameter 2 inches, reported depth 20 feet. Land-surface datum is 1,535.0 feet above msl. Highest water level 9.99 below lsd, Oct. 15, 1951; lowest 13.88 below lsd, Mar. 15, 1949. Records available: 1948-51. Jan. 16, 13.32; Mar. 5, 13.28; May 2, 11.06; May 23, 11.02; July 11, 10.74; Aug. 29, 11.22; Oct. 15, 9.99.

La 86. A. F. Hoeft. NW<sub>4</sub><sup>1</sup>SE<sub>4</sub><sup>1</sup> sec. 16, T. 32 N., R. 10 E. Drilled unused water-table well in sand, diameter 4 inches, reported depth 48 feet. Land-surface datum is 1,526 feet above msl. Highest water level 7.75 below lsd, Oct. 15, 1951; lowest 12.20 below lsd, Oct. 11, 1950. Records available: 1948-51. Mar. 5, 9.74; May 2, 8.25; May 23, 8.36; July 11, 7.91; Aug. 29, 8.59; Oct. 15, 7.75.

La 107. Carlsen. SW<sub>4</sub><sup>1</sup>NW<sub>4</sub><sup>1</sup> sec. 26, T. 32 N., R. 12 E. Drilled domestic water-table well in sand, diameter 5 inches, reported depth 128 feet. Land-surface datum is 1,653.34 feet above msl. Highest water level 114.09 below lsd, Aug. 6, 1948; lowest 117.68 below lsd, Oct. 12, 1950. Records available: 1948-51. Jan. 16, 117.33; Mar. 6, 117.31; May 2, 117.43; May 23, 117.40; July 11, 117.24; Aug. 29, 117.03; Oct. 15, 116.98.

La 118. Wisconsin Public Service Corp. NE<sub>4</sub><sup>1</sup>NW<sub>4</sub><sup>1</sup> sec. 20, T. 31 N., R. 11 E. Driven unused water-table well in sand, diameter 1½ inches, depth 22 feet, well point. Land-surface datum is 1,510.95 feet above msl. Highest water level 6.88 below lsd, July 19, 1943; lowest 13.84 below lsd, Feb. 28, 1949. Records available: 1942-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9 19 23 30	13.5	May 8 14 28 June 8	10.49	July 17 27 28 Sept. 10	11.08	Nov. 15 26 Dec. 3 10	11.16
	13.58		10.49		11.15		11.06
	13.6		10.65		11.3		10.94
	13.66		10.75		11.54		10.9
Apr. 2 16 30	12.75	June 12 20 July 5	10.79	11.5 11.46 11.19	11.5	17 24 31	10.86
	10.79		10.88		11.46		10.91
	10.53		11.05		11.19		10.88

La 200. Antigo Water Department. NE<sub>4</sub><sup>1</sup>NW<sub>4</sub><sup>1</sup> sec. 29, T. 31 N., R. 11 E. Jetted unused water-table well in sand, diameter 6 inches, reported depth 15 feet, cased to 14. Highest water level 3.44 below lsd, Apr. 12, 1951; lowest 6.82 below lsd, Feb. 22, 1951. Records available: 1948-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.25	....	6.28	4.28	4.51	5.28	5.53	6.37	5.56	5.20	4.85	5.13
2	6.26	....	6.28	4.18	4.51	5.09	5.47	6.25	5.66	5.26	4.90	4.93
3	6.26	....	6.32	4.18	4.42	4.96	5.47	6.48	5.62	5.25	5.01	4.89
4	6.26	....	6.33	4.02	4.56	4.96	4.99	6.49	5.71	4.98	5.01	4.89
5	6.26	....	6.34	3.85	4.56	4.98	5.00	6.23	5.90	5.20	....	4.92
6	6.30	....	6.34	3.82	4.46	5.22	5.27	6.03	5.90	5.20	....	5.06
7	....	....	6.18	3.86	4.70	5.22	5.24	6.03	5.71	4.99	....	5.06
8	....	....	6.18	3.80	4.69	5.20	4.89	6.01	5.83	5.24	....	4.94
9	....	....	6.25	3.76	4.69	5.36	5.04	6.14	5.83	5.24	5.11	4.95
10	....	....	6.25	3.81	4.86	5.36	5.04	6.14	5.65	5.17	5.11	5.00
11	....	....	6.23	3.77	4.86	5.30	4.94	6.06	5.79	5.28	4.92	5.00
12	6.36	....	6.23	3.70	4.87	5.48	5.18	6.07	5.79	5.29	4.87	5.10
13	6.36	....	6.28	3.81	4.92	5.49	5.48	6.05	5.20	5.24	4.82	5.10
14	6.30	....	6.28	3.81	4.92	5.46	5.48	5.88	5.34	5.24	4.53	5.16
15	6.30	....	6.25	3.86	4.92	5.72	5.39	5.98	5.34	5.13	4.67	5.26
16	6.34	6.68	6.26	4.06	5.06	5.74	5.62	5.98	5.16	5.13	4.67	5.26
17	6.35	6.79	6.16	4.05	5.06	5.52	5.63	5.81	5.35	5.27	4.67	5.22
18	6.30	6.80	6.16	4.03	4.98	5.48	5.69	6.08	5.35	5.27	....	5.41
19	....	6.76	6.05	4.16	5.17	5.42	5.93	6.11	5.26	5.08	....	....
20	....	6.70	6.45	4.12	5.14	5.30	5.94	5.92	5.38	5.22	....	5.31
21	....	6.81	6.47	4.00	5.00	5.47	5.70	6.17	5.40	5.17	4.91	5.41
22	....	6.82	6.37	4.11	5.16	5.47	5.64	6.18	5.22	....	4.91	....
23	....	6.76	6.54	4.08	5.11	5.39	5.66	6.15	5.28	....	4.78	....
24	....	6.76	6.54	4.11	5.32	5.47	5.74	6.29	5.27	....	5.00	....
25	....	6.52	6.44	4.31	5.32	5.47	6.04	6.29	5.24	4.85	5.00	....
26	6.45	6.37	6.51	4.31	5.32	5.26	6.06	6.06	5.24	4.93	4.92	....
27	6.45	6.22	6.51	4.23	5.01	5.37	5.96	6.19	5.22	4.84	5.02	5.49
28	6.46	6.22	6.00	4.36	5.20	5.37	6.16	6.21	5.19	4.85	5.02	5.49
29	....	....	5.75	4.36	5.19	5.33	6.18	6.18	5.29	4.84	5.04	5.38
30	....	....	4.45	4.30	5.12	5.53	6.05	6.25	5.32	4.81	5.13	5.46
31	....	....	4.37	5.28	5.28	6.35	5.71	5.00	5.46	....	....	....

La 227. Luhring. NW<sub>4</sub><sup>1</sup>NW<sub>4</sub><sup>1</sup> sec. 20, T. 32 N., R. 12 E. Drilled unused well in sand, diameter 4 inches, reported depth 111 feet. Land-surface datum is 1,638 feet above msl. Highest water level 94.22 below lsd, July 12, 1949; lowest 94.58 below lsd, Aug. 16, 1951. Records available: 1949, 1951. Aug. 16, 94.58; Oct. 17, 94.45.

La 270. U. S. Geol. Survey. SE<sub>4</sub><sup>1</sup>NW<sub>4</sub><sup>1</sup> sec. 23, T. 31 N., R. 10 E. Driven unused water-table well in sand, diameter 1 $\frac{1}{4}$  inches. Highest water level 3.54 below lsd, May 16, 1950; lowest 5.61 below lsd, Aug. 25, 1949. Records available: 1949-51. May 23, 4.43; measurement discontinued.

#### Lincoln County

Ln 25. U. S. Geol. Survey. SE<sub>4</sub><sup>1</sup>NE<sub>4</sub><sup>1</sup> sec. 36, T. 34 N., R. 6 E. Driven unused water-table well in deposits of Pleistocene age, diameter 1 $\frac{1}{4}$  inches, depth 23 feet, cased to 23, well point. Highest water level 4.31 below lsd, Apr. 8, 1951; lowest 6.65 below lsd, Sept. 29, 1948. Records available: 1944-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7 14 22 29	6.24	Apr. 8 15 25 29	4.31	July 30 Aug. 7 13 20	5.48	Oct. 21 28 Nov. 4 13	5.13
	6.27		4.40		5.20		5.16
	6.25		4.34		5.41		5.30
	6.34		4.42		5.32		4.83
Feb. 4 11 18 25	6.42	June 4 11 19 26	4.46	Sept. 3 10 17	5.78	Dec. 2 25 9	4.94
	6.40		4.86		5.09		5.15
	6.39		4.02		5.07		4.92
	5.84		4.61		5.05		5.01
Mar. 5 11 28	5.64	July 2 9 16	4.90	Oct. 8	5.15	16 23 30	5.39
	5.60		4.50		4.99		5.45
	5.28		4.96		5.05		5.49
Apr. 1	5.00	23	5.00	16	5.15		

#### Marathon County

Mr 1. George Chrudimsky. NW<sub>4</sub><sup>1</sup>NE<sub>4</sub><sup>1</sup> sec. 25, T. 30 N., R. 10 E. Drilled domestic stock water-table well in sand and gravel of Pleistocene age, diameter 4 inches, reported depth 85 feet. Highest water level 31.47 below lsd, Apr. 30, 1949; lowest 38.27 below lsd, Mar. 25, 1950. Records available: 1948-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6 11 21 27	37.25	Apr. 7 14 21 28	36.91	July 7 14 21 28	35.22	Oct. 6 13 20 27	35.02
	37.42		36.17		35.29		35.00
	37.41		35.85		35.07		35.01
	37.43		35.67		35.07		34.92
Feb. 3 10 17 24	37.53	May 5 12 19 26	35.48	Aug. 4 11 18 25	35.02	Nov. 3 10 17 24	34.87
	37.62		35.51		35.03		34.82
	37.62		35.39		35.01		34.77
	37.72		35.34		35.00		34.72
Mar. 3 10 17 24 31	37.72	June 2 9 16 22 30	35.27	Sept. 1 8 15 22 29	35.03	Dec. 1 8 15 22 31	34.47
	37.80		35.27		35.01		33.47
	37.80		35.32		35.02		34.22
	37.87		35.27		35.01		34.17

Mr 7. City of Marshfield. SE<sub>4</sub><sup>1</sup>SE<sub>4</sub><sup>1</sup> sec. 33, T. 26 N., R. 3 E. Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 7 inches, reported depth 49 feet, cased to 30, screen 30-49. Highest water level 16.92 below lsd, June 12, 1950; lowest 26.70 below lsd, Nov. 26, 1951. Records available: 1950-51.

#### Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	20.33	.....	21.94	22.63	23.19	23.90	24.26	25.11	.....	.....	.....	26.41
2	20.33	.....	21.94	22.61	23.22	23.91	24.26	25.14	.....	26.16	.....	26.31
3	20.33	.....	21.94	22.47	23.14	24.04	24.29	25.17	.....	26.16	.....	26.31
4	20.33	.....	21.96	22.41	23.25	24.08	24.32	25.18	.....	26.21	.....	26.45
5	20.32	21.46	21.97	22.37	23.38	24.00	24.35	25.20	.....	26.17	.....	26.38
6	20.32	21.46	21.95	22.30	23.44	24.00	24.39	25.23	.....	26.16	.....	.....
7	20.30	21.51	21.95	22.30	23.30	24.00	.....	25.29	26.20	26.16	.....	.....
8	20.30	21.52	21.97	22.29	23.33	24.05	.....	25.30	26.21	26.21	.....	.....
9	.....	21.55	21.98	22.29	23.43	.....	.....	25.32	26.23	26.17	.....	.....
10	.....	21.63	22.00	22.39	23.42	.....	.....	25.36	26.29	26.16	.....	.....

## Mr 7--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	.....	21.64	22.02	22.44	23.39	.....	.....	25.44	26.31	26.18	.....	.....
12	.....	21.69	22.03	.....	23.51	.....	.....	25.44	26.34	26.17	.....	.....
13	.....	21.70	22.06	22.21	23.51	.....	24.62	25.46	26.31	26.18	.....	.....
14	.....	21.71	.....	22.21	23.53	.....	24.64	.....	.....	26.16	.....	.....
15	.....	21.71	22.09	22.34	23.54	24.01	24.69	25.66	26.24	26.20	.....	.....
16	.....	21.73	22.14	22.46	23.55	24.05	24.75	25.71	26.26	26.19	.....	.....
17	.....	21.75	22.18	22.50	23.56	24.07	24.74	25.71	26.21	26.22	.....	.....
18	.....	21.76	22.21	22.60	23.56	24.12	24.76	25.78	26.20	26.20	.....	.....
19	.....	21.77	22.29	22.78	23.57	24.11	24.77	25.79	26.19	26.21	.....	.....
20	.....	21.81	22.35	22.84	23.61	24.18	24.82	25.85	26.18	26.19	26.33	.....
21	.....	21.81	22.34	22.69	23.64	24.16	24.86	25.86	26.20	26.24	26.56	.....
22	.....	21.83	22.37	22.84	23.68	24.18	24.87	25.86	26.18	26.32	26.58	.....
23	.....	21.84	22.41	22.96	23.69	.....	24.90	25.89	26.17	26.31	26.63	.....
24	.....	21.85	22.40	22.93	23.69	.....	24.92	25.91	26.21	26.21	26.63	.....
25	.....	21.85	22.42	22.98	23.75	24.16	24.96	25.93	26.16	26.25	26.61	.....
26	.....	21.90	22.45	23.10	23.76	24.19	24.97	25.96	26.20	26.27	26.70	.....
27	.....	21.91	22.52	22.95	23.84	24.28	25.01	26.01	26.18	26.27	.....	.....
28	.....	21.92	22.59	22.82	23.83	24.21	25.02	26.02	26.18	26.28	26.37	.....
29	.....	.....	22.64	23.07	23.85	24.28	25.04	26.04	26.16	.....	26.42	.....
30	.....	.....	22.76	23.15	23.87	24.23	25.05	.....	.....	.....	26.40	.....
31	.....	.....	22.76	.....	23.88	.....	25.09	.....	.....	.....	.....	.....

Mr 27. Conrad Kremsreiter. SE<sub>4</sub><sup>1</sup>SE<sub>4</sub><sup>1</sup> sec. 24, T. 29 N., R. 3 E. Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 8 to 4 inches, reported depth 42 feet. Highest water level 2.87 below lsd, June 17, 1946; lowest 9.98 below lsd, Apr. 5, 1950. Records available: 1944-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	8.97	Mar. 22	9.84	May 30	6.33	Aug. 31	7.36
10	8.95	28	8.79	June 4	6.09	Sept. 3	7.38
17	8.97	Apr. 5	8.29	14	5.89	14	6.95
24	9.10	9	7.83	July 5	5.43	16	7.06
30	9.16	17	7.06	28	5.46	28	7.37
Feb. 9	9.24	25	6.03	31	5.61	Oct. 13	6.79
22	9.34	30	5.51	Aug. 9	6.19	20	6.14
Mar. 6	9.09	May 11	5.14	14	6.58	29	5.08
17	8.89	22	6.21				

Mr 28. U. S. Geol. Surv. NE<sub>4</sub><sup>1</sup>NE<sub>4</sub><sup>1</sup> sec. 31, T. 27 N., R. 9 E. Driven unused water-table well in sand and gravel of Pleistocene age, diameter 1 $\frac{1}{4}$  inches, depth 28 feet, cased to 28, well point. Land-surface datum is 1,229 feet above msl. Highest water level 17.30 below lsd, Sept. 10, 1945; lowest 24.84 below lsd, Mar. 26, 1951. Records available: 1944-51.

Jan.	2	24.52	Apr. 2	24.35	July 2	22.37	Oct. 1	22.24
	8	24.54	9	23.33	9	22.44	8	22.25
	15	24.58	16	22.85	16	22.48	16	22.26
	22	24.56	22	22.10	23	22.30	22	22.20
	29	24.27	30	22.65	30	22.28	29	22.22
Feb.	5	24.69	May 7	22.56	Aug. 6	22.25	Nov. 5	22.24
	12	24.69	14	22.56	13	22.29	12	22.26
	19	24.74	21	22.49	20	22.26	26	22.15
	26	24.80	28	22.45	27	22.25	Dec. 3	22.16
Mar.	5	24.65	June 4	22.43	Sept. 10	22.23	10	22.13
	12	24.72	17	22.39	11	22.25	17	21.97
	19	24.77	25	22.41	15	22.27	24	21.96
	26	24.84	29	22.40	24	22.23	31	21.93

Marinette County

Mt 1. R. S. Skidmore. SE<sub>4</sub><sup>1</sup>NW<sub>4</sub><sup>1</sup> sec. 6, T. 30 N., R. 24 E. Drilled unused artesian well in sandstone, diameter 5 inches, reported depth 700 feet. Highest water level 4.98 below lsd, Apr. 27, 1948; lowest 29.62 below lsd, Sept. 20, 1951. Records available: 1946-51. Feb. 6, 12.06; Apr. 12, 15.38; July 10, 21.02; Sept. 20, 29.62; Dec. 5, 19.10.

Mt 5. City of Peshtigo. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 19, T. 30 N., R. 23 E. Drilled unused artesian well in sandstone, diameter 5 inches, reported depth 700 feet. Highest water level 17.24 below lsd, May 1, 1950; lowest 27.13 below lsd, Oct. 28, 1948. Records available: 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	23.12	Apr. 12	23.90	June 14	24.83	Aug. 14	24.33
15	25.95	16	23.00	30	25.00	Sept. 1	22.67
Feb. 6	26.88	30	22.85	July 10	23.59	15	22.81
12	24.85	May 15	23.75	16	24.12	20	22.47
28	25.35	June 1	24.15	Aug. 4	24.70	Dec. 4	21.50
Mar. 15	24.74						

Mt 7. Wisconsin Conservation Department. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, T. 37 N., R. 20 E. Drilled unused well, reported depth 33 feet. Highest water level 19.87 below lsd, July 17, 1951; lowest 23.26 below lsd, Nov. 2, 1948. Records available: 1948-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27, 1948	22.50	Dec. 28, 1948	22.84	Feb. 28, 1950	22.31	Feb. 27, 1951	22.05
Feb. 24	22.61	Jan. 25, 1949	22.94	Mar. 28	21.79	Mar. 27	21.86
Mar. 30	21.90	Mar. 29	22.60	Apr. 25	20.19	Apr. 24	20.21
Apr. 27	21.83	May 31	22.51	May 30	20.16	May 29	20.24
May 25	21.00	June 28	22.49	June 27	20.60	June 26	20.29
June 29	21.42	July 26	22.16	July 25	20.96	July 17	19.87
July 27	22.71	Aug. 30	22.33	Aug. 29	21.36	Aug. 28	20.26
Aug. 31	22.96	Sept. 27	22.43	Sept. 26	21.57	Sept. 25	20.50
Sept. 28	23.11	Oct. 25	22.36	Oct. 31	21.74	Oct. 30	20.30
Oct. 26	23.24	Nov. 29	22.33	Dec. 26	21.97	Nov. 27	20.34
Nov. 2	23.26	Dec. 27	22.32	Jan. 30, 1951	22.09	Dec. 25	20.58
30	22.90	Jan. 31, 1950	22.20				

Mt 9. Fox River Valley Girl Scouts. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 35 N., R. 22 E. Drilled domestic water-table well in glacial till, diameter 6 inches, depth 75 feet. Highest water level 7.67 below lsd, Apr. 18, May 3, June 1, 1951; lowest 10.42 below lsd, Feb. 15, 1951. Records available: 1950-51.

Sept. 8, 1950	8.42	Jan. 12, 1951	10.17	May 3, 1951	7.67	Aug. 31, 1951	7.92
Oct. 13	8.42	Feb. 15	10.42	June 1	7.67	Sept. 28	7.92
Nov. 15	9.17	Mar. 13	9.50	July 3	7.75	Oct. 30	7.83
Dec. 13	9.09	Apr. 18	7.67	Aug. 1	7.92	Nov. 29	8.25

#### Marquette County

Mq 5. L. Wilson. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, T. 14 N., R. 10 E. Drilled unused well, diameter 6 inches, depth 60 feet. Highest water level 41.48 below lsd, Aug. 28, 1951; lowest 45.19 below lsd, Mar. 8, 1951. Records available: 1949-51. Jan. 25, 45.07; Mar. 8, 45.19; May 3, 43.38; July 12, 42.01; Aug. 28, 41.48; Nov. 1, 41.68.

Mq 7. J. Croarken. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 33, T. 16 N., R. 10 E. Drilled unused well, diameter 6 inches. Highest water level 30.80 below lsd, July 12, 1951; lowest 34.63 below lsd, Mar. 23, 1950. Records available: 1949-51. Jan. 25, 33.34; Mar. 8, 32.00; May 3, 31.55; July 12, 30.80; Aug. 28, 31.14; Nov. 7, 31.35.

Mq 9. Village of Westfield. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 12, T. 16 N., R. 8 E. Drilled unused well in sandstone, diameter 6 inches, depth 274 feet. Highest water level 15.11 below lsd, July 10, Aug. 28, 1951; lowest 17.20 below lsd, Mar. 23, 1950. Records available: 1949-51. Jan. 25, 17.09; Mar. 5, 16.93; Apr. 30, 15.59; July 10, 15.11; Aug. 28, 15.11; Oct. 31, 15.31.

Mq 11. U. S. Geol. Survey. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 17, T. 15 N., R. 9 E. Driven unused water-table well in fine sand, diameter 1 $\frac{1}{4}$  inches, depth 12 feet, cased to 12, well point. Highest water level 0.74 below lsd, Apr. 30, 1951; lowest 2.28 below lsd, Oct. 17, 1950. Records available: 1950-51. Jan. 25, 1.74; Mar. 5, 0.80; Apr. 30, 0.74; Aug. 31, 1.43; Oct. 31, 1.31.

#### Milwaukee County

Ml 7. Milwaukee County. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 13, T. 8 N., R. 21 E. Drilled public-supply artesian well in sandstone and limestone, diameter 10 to 8 inches, reported depth 1,526 feet. Land-surface datum is 704 feet above msl. Highest water level 42.57 below lsd, May 11, 1948; lowest 56.50 below lsd, Jan. 24, 1951. Records available: 1946-51. Jan. 24, 56.50; May 25, 47.31; July 10, 50.12; Sept. 4, 54.34; Oct. 31, 50.39; Dec. 19, 48.16.

MI 8. Milwaukee County. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 8 N., R. 21 E. Drilled unused artesian well in sandstone, diameter 12 to 10 inches, reported depth 1,407 feet, cased to 633. Land-surface datum is 677 feet above msl. Highest water level 50.54 below lsd, June 4, 1947; lowest 153.36 below lsd, Sept. 20, 1949. Records available: 1946-51. Jan. 24, 144.96; May 22, 143.19; July 17, 146.70; Sept. 4, 150.14; Nov. 14, 146.84; Dec. 19, 142.74.

MI 36. A. O. Smith Corp. 3533 North 27th St., Milwaukee. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 12, T. 7 N., R. 21 E. Drilled unused artesian well in sandstone, diameter 14 inches, reported depth 1,091 feet, cased to 774. Land-surface datum is 673 feet above msl. Highest water level 134.26 below lsd, June 25, 1947; lowest 190.20 below lsd, Aug. 16, 1951. Records available: 1946-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	173.50	171.29	169.86	170.15	172.28	176.28	181.42	185.80	188.87	188.56	185.81	183.35
2	173.21	171.37	169.90	170.13	172.33	176.33	181.62	186.30	188.84	188.15	185.82	183.25
3	172.81	171.37	169.69	170.12	172.24	176.40	181.73	187.24	188.81	187.89	185.64	183.00
4	173.08	171.19	169.87	170.34	172.36	176.59	182.24	187.90	188.80	187.88	185.57	182.76
5	173.08	171.19	169.87	170.47	172.50	176.63	182.56	188.28	188.65	187.93	185.70	182.80
6	173.09	171.01	169.70	170.50	172.74	176.62	182.71	188.53	188.51	187.97	185.66	182.66
7	173.09	171.05	169.84	170.34	172.68	176.59	182.62	188.96	188.66	187.77	185.21	182.96
8	172.74	171.07	170.11	170.38	172.67	176.58	182.54	189.23	188.68	187.67	185.26	183.10
9	172.46	171.17	170.41	170.42	172.92	176.58	182.49	189.48	188.53	187.51	185.22	183.01
10	172.34	171.10	170.46	170.55	172.98	176.66	182.68	189.62	188.31	187.50	185.23	182.97
11	172.40	170.58	170.26	170.64	173.05	176.58	182.75	189.70	188.59	187.29	185.22	182.44
12	172.45	170.33	170.04	170.55	173.15	176.60	182.81	189.80	188.72	187.32	184.85	182.55
13	172.43	170.65	169.70	170.60	173.49	176.85	182.90	189.80	188.97	187.26	184.38	182.73
14	172.14	170.72	169.86	170.80	173.53	177.03	182.93	189.98	189.28	187.09	184.21	182.73
15	171.67	170.65	170.06	171.07	173.58	177.02	182.82	190.02	189.41	186.75	184.43	182.75
16	171.66	170.35	170.28	171.20	173.68	177.30	182.74	190.20	189.41	186.57	184.56	182.75
17	171.40	170.76	170.31	171.26	173.97	177.60	182.95	190.18	189.33	186.57	184.58	182.57
18	171.38	170.73	170.26	171.33	174.29	178.04	182.96	190.25	189.24	186.53	184.53	182.16
19	171.42	169.86	170.18	171.76	174.47	178.43	183.12	190.18	189.15	186.49	184.48	182.17
20	171.75	169.86	170.14	171.97	174.55	179.26	183.25	189.99	189.17	186.33	184.37	181.74
21	171.88	169.96	170.18	171.95	174.77	179.80	183.19	189.72	189.13	185.96	184.07	181.60
22	171.84	170.03	170.18	172.07	175.02	180.26	183.39	189.77	189.18	185.82	183.96	181.83
23	171.32	170.12	170.04	172.23	175.29	180.60	183.44	189.84	189.23	185.86	183.98	181.87
24	171.48	170.07	170.29	172.20	175.41	180.93	183.46	189.75	189.17	185.70	184.04	181.86
25	171.58	169.83	170.35	172.21	175.54	181.03	183.50	189.58	189.17	185.79	184.00	181.66
26	171.60	169.44	170.32	172.45	175.52	180.86	183.55	189.32	189.04	185.77	183.71	181.74
27	171.63	169.76	170.00	172.39	175.71	181.06	183.74	189.09	188.98	185.78	184.70	181.74
28	171.66	169.75	169.92	172.17	175.95	181.22	184.13	188.96	189.19	185.70	183.51	181.40
29	171.70		169.83	172.18	176.13	181.33	184.40	188.96	189.14	185.68	183.51	180.95
30	171.67		169.93	172.21	176.28	181.34	184.59	188.85	188.85	185.54	183.45	180.84
31	171.46		170.07		176.32		185.16	188.80		185.75		180.67

MI 45. Milwaukee Journal. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 29, T. 7 N., R. 22 E. Drilled unused artesian well in dolomite, diameter 8 to 5 inches, reported depth 1,410 feet, cased to 1,068. Land-surface datum is 591 feet above msl. Highest water level 45.42 below lsd, Apr. 10, 1951; lowest 154.93 below lsd, July 29, 1949. Records available: 1946-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	47.74	47.92	46.70	46.26	50.50	54.13	53.35	56.52	58.81	55.30	53.15	50.27
2	47.60	49.91	47.43	46.33	51.82	53.31	54.88	56.78	56.79	55.60	52.12	50.25
3	47.41	50.06	48.02	46.30	53.40	51.00	55.17	56.65	54.42	55.69	49.88	50.00
4	47.75	49.40	47.81	46.40	50.90	52.80	.....	56.43	57.44	56.20	49.10	50.07
5	47.83	48.09	47.04	46.46	50.62	53.53	.....	54.54	57.88	56.38	49.17	49.64
6	47.93	47.62	46.48	46.44	48.87	53.30	.....	55.50	58.69	54.84	49.10	49.76
7	47.92	47.51	46.53	46.20	50.73	53.71	.....	55.98	58.65	53.20	48.80	49.98
8	47.71	47.51	46.64	45.95	51.80	53.80	.....	56.21	58.27	53.79	49.37	49.97
9	47.67	47.49	46.73	45.92	51.46	43.87	.....	57.43	56.22	53.90	49.65	50.03
10	47.70	47.39	46.72	46.50	50.86	51.60	55.05	58.37	57.92	53.73	52.73	50.03
11	47.83	46.99	46.57	47.62	51.02	53.39	55.19	58.42	58.23	54.92	51.80	49.78
12	47.91	46.97	46.35	47.90	49.12	53.72	55.57	56.51	59.10	54.89	54.46	49.98
13	47.18	47.32	46.05	47.89	53.49	53.94	55.29	57.69	58.93	54.61	54.53	50.13
14	47.69	47.43	45.97	48.06	52.12	54.47	54.80	58.20	58.80	52.70	54.79	50.12
15	47.60	47.34	46.10	47.67	53.11	54.00	52.45	58.52	58.80	54.52	53.36	49.89
16	47.62	47.02	46.23	46.65	53.63	54.60	54.27	59.40	56.90	55.00	52.10	49.74
17	47.54	46.93	46.24	46.88	52.18	51.75	54.70	59.13	59.00	54.41	51.88	49.58
18	47.49	47.91	46.19	48.48	53.19	54.83	59.00	59.00	59.01	55.22	51.60	49.13
19	47.49	46.84	46.23	49.08	53.80	54.08	55.38	57.10	59.00	54.25	51.49	49.20
20	47.68	46.83	46.63	49.23	51.40	54.10	55.40	58.18	59.39	53.72	51.50	49.14

## MI 45--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	47.87	46.84	46.32	48.16	53.31	54.67	55.30	58.58	59.39	52.10	51.38	49.22
22	47.85	46.90	46.30	46.74	53.53	54.50	53.25	58.99	58.30	54.60	51.27	49.22
23	47.48	46.93	46.20	46.25	53.33	54.52	54.89	59.23	56.65	54.42	51.02	49.29
24	47.60	46.87	46.38	46.15	54.11	52.20	55.53	59.10	57.38	52.98	51.11	49.25
25	47.64	46.63	46.46	46.00	.....	53.94	56.20	58.81	56.48	54.33	50.98	49.20
26	47.66	46.34	46.48	46.22	.....	54.23	56.59	56.75	56.10	54.60	51.22	49.39
27	47.57	46.67	46.25	46.10	.....	54.89	56.49	57.90	56.52	52.83	51.07	49.36
28	47.59	46.68	46.20	50.61	.....	55.40	56.38	58.48	55.40	51.45	50.95	48.94
29	47.73	46.12	48.20	.....	55.37	54.21	58.02	54.40	52.79	50.51	48.81	
30	47.68	46.14	49.98	.....	55.17	55.52	58.94	52.90	53.29	50.22	48.80	
31	47.52	46.24	.....	54.31	.....	56.19	59.00	.....	51.72	.....	48.67	

MI 56. National Enameling & Stamping Co. North Tenth St. and West St. Paul Avenue, Milwaukee.  $SE_1^4SE_1^4$  sec. 30, T. 7 N., R. 22 E. Drilled unused artesian well in sandstone, diameter 14 to 8 inches, reported depth 2,100 feet. Land-surface datum is 589 feet above msl. Highest water level 70.93 below lsd, Apr. 4, 1950; lowest 118.51 below lsd, Sept. 13, 1950. Records available: 1946-51. Jan. 24, 104.46; May 22, 111.59; July 17, 113.55; Sept. 4, 116.26; Oct. 31, 110.15; Dec. 19, 102.51.

MI 79. Forest Home Cemetery.  $SW_1^4NW_1^4$  sec. 7, T. 6 N., R. 22 E. Drilled unused artesian well in sandstone of Cambrian age, diameter 1 inches, reported depth 1,605 feet, cased to 200. Land-surface datum is 663 feet above msl. Highest water level 153.24 below lsd, May 19, 1947; lowest 230.38 below lsd, Aug. 2, 1951. Records available: 1946-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1	207.43	206.42	205.04	207.46	209.40	.....	.....	229.48	223.02	213.85	218.11	218.41	
2	207.52	206.88	205.04	.....	210.30	.....	.....	230.38	221.58	.....	218.22	217.21	
3	207.52	206.71	204.49	.....	219.19	.....	.....	231.35	219.30	220.08	218.23	214.65	
4	208.35	206.12	204.16	208.20	.....	.....	.....	213.48	225.30	218.33	216.70	217.01	215.50
5	208.40	205.29	203.70	208.75	.....	.....	.....	212.20	222.20	226.80	217.30	217.48	216.09
6	208.38	205.57	203.35	208.92	.....	214.10	211.00	220.55	221.20	217.35	217.50	216.52	
7	207.35	206.39	204.05	208.85	.....	214.25	210.08	212.35	220.86	216.68	.....	217.60	
8	206.56	206.97	204.58	208.10	.....	215.11	209.33	222.14	220.86	215.62	.....	217.90	
9	207.08	207.68	204.94	206.42	212.02	215.32	209.63	222.59	219.82	216.06	.....	217.71	
10	207.56	207.79	205.04	207.35	212.21	222.90	211.00	230.90	217.90	216.49	.....	216.55	
11	208.03	206.62	204.79	207.82	212.55	.....	218.10	225.32	218.71	216.60	.....	217.80	
12	206.94	206.33	203.04	207.90	212.50	.....	213.30	222.53	219.26	216.94	.....		
13	206.31	207.94	203.55	208.23	219.76	216.39	212.32	227.60	219.87	225.58	.....		
14	205.35	208.31	204.10	208.33	213.80	224.00	211.70	222.50	220.09	220.65	217.68	.....	
15	204.20	208.10	204.73	207.78	212.54	.....	218.38	221.92	220.00	218.22	218.48	.....	
16	204.20	207.26	206.16	206.64	.....	.....	212.12	221.75	219.08	216.28	218.80	.....	
17	205.55	206.54	206.44	207.15	.....	.....	212.90	222.30	217.15	216.85	218.91	.....	
18	206.49	205.72	206.18	207.64	.....	216.52	213.60	222.43	217.46	217.45	218.12	.....	
19	206.97	203.70	204.11	208.38	.....	217.38	215.00	227.68	217.58	217.92	216.71	214.77	
20	207.63	204.04	204.68	214.28	.....	218.44	224.00	220.72	225.00	217.88	217.60	214.53	
21	207.60	204.83	205.18	213.77	.....	223.80	218.46	220.92	220.00	216.50	217.80	214.05	
22	205.72	205.24	205.49	208.77	.....	.....	217.08	221.03	219.10	215.98	217.81	214.01	
23	206.44	205.51	206.00	214.80	.....	219.73	216.01	221.12	218.13	216.58	.....	213.48	
24	207.03	205.43	206.30	209.25	215.61	225.50	216.52	223.47	216.12	217.52	.....	212.63	
25	207.68	204.81	205.78	208.68	215.77	.....	225.08	221.20	216.47	217.89	.....	211.38	
26	207.65	203.12	205.53	209.43	215.61	.....	226.40	220.32	216.42	218.26	.....	210.00	
27	207.96	204.14	206.07	209.50	214.72	.....	220.50	219.25	216.67	218.19	217.34	210.30	
28	207.76	204.27	206.77	214.14	213.51	.....	219.63	220.47	216.80	217.10	217.80	210.69	
29	206.04	207.33	209.40	214.10	.....	226.47	221.18	216.79	216.23	217.94	210.72		
30	206.23	207.99	208.45	221.23	.....	220.00	227.00	215.80	217.05	218.41	210.49		
31	206.08	207.95	.....	.....	.....	227.60	223.00	.....	217.73	.....	210.30		

MI 88. Red Star Yeast. Formerly Milwaukee Vinegar Works.  $NW_1^4SW_1^4$  sec. 25, T. 6 N., R. 22 E. Drilled industrial artesian well in sandstone and limestone, reported depth 1,312 feet. Land-surface datum is 686 feet above msl. Highest water level 113.85 below lsd, June 3, 1947; lowest 161.15 below lsd, Dec. 4, 1951. Records available: 1946-51. Jan. 29, 148.36; May 22, 146.82; Aug. 14, 154.46; Oct. 9, 152.05; Dec. 4, 161.15.

MI 91. U. S. Government.  $NE_1^4NE_1^4$  sec. 34, T. 6 N., R. 21 E. Drilled public-supply artesian well in sandstone, diameter 16 to 12 inches, reported depth 1,855 feet, cased to 487. Land-surface datum is 760 feet above msl. Highest water level 200.17 below lsd, June 6, 1946; lowest 240.89 below lsd, Oct. 16, 1951. Records available: 1946-51. Jan. 24, 234.27; May 22, 235.34; June 13, 236.13; Oct. 16, 240.89.

MI 94. Milwaukee County. Whitnall Park. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 32, T. 6 N., R. 21 E. Drilled public-supply artesian well in sandstone, diameter 20 to 10 inches, reported depth 1, 845 feet, cased to 525. Land-surface datum is 773 feet above msl. Highest water level 199.97 below lsd, July 10, 1946; lowest 236.38 below lsd, Oct. 31, 1951. Records available: 1946-51. Jan. 24, 230.41; May 22, 231.11; June 13, 232.71; Aug. 28, 235.48; Oct. 31, 236.38; Dec. 4, 236.16.

MI 118. A. Schaefer. 5465 North 51st St., Milwaukee. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 35, T. 8 N., R. 21 E. Drilled domestic water-table well in sand and gravel of Pleistocene age, diameter 6 inches, depth 135 feet. Land-surface datum is 679.85 feet above msl. Highest water level 26.15 below lsd, May 11, 1948; lowest 47.79 below lsd, June 13, 1946. Records available: 1946-51. Jan. 24, 29.51; May 22, 26.24; Sept. 27, 29.23.

MI 120. Nunn-Bush Shoe Co. North 5th and West Hadley Sts., Milwaukee. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 17, T. 7 N., R. 22 E. Drilled unused artesian well in Niagara dolomite, diameter 10 inches, reported depth 400 feet, cased to 104. Land-surface datum is 685 feet above msl. Highest water level 81.82 below lsd, May 20, 1946; lowest 96.99 below lsd, Sept. 11, 1951. Records available: 1946-49, 1951. July 17, 96.56; Sept. 11, 96.99; Nov. 6, 95.70; Dec. 26, 93.17.

MI 121. Milwaukee Equipment Co. Formerly F. M. Nimphius. 311 Marion St., Milwaukee. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 13, T. 5 N., R. 22 E. Drilled unused well, diameter 8 inches, depth 268 feet. Land-surface datum is 644 feet above msl. Highest water level 56.46 below lsd, Aug. 9, 1946; lowest 62.92 below lsd, Oct. 9, 1951. Records available: 1946-51. Jan. 24, 61.56; May 22, 61.21; June 20, 61.15; Aug. 14, 62.33; Oct. 9, 62.92; Dec. 4, 62.33.

MI 124. Good Hope Cemetery. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 23, T. 6 N., R. 21 E. Drilled irrigation artesian well in sandstone and Niagara dolomite, diameter 12-8 inches, reported depth 1,712 feet. Land-surface datum is 772 feet above msl. Highest water level 109.66 below lsd, Nov. 30, 1946; lowest 154.70 below lsd, July 10, 1951. Records available: 1946-51. Jan. 24, 144.17; May 22, 152.70; July 10, 154.70. Measurement discontinued.

MI 125. Good Hope Cemetery. South 43d St. and West Cold Spring Rd. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 23, T. 6 N., R. 21 E. Drilled unused well in sandstone and limestone, diameter 12 inches, reported depth 700 feet. Land-surface datum is 770 feet above msl. Highest water level 105.34 below lsd, Nov. 30, 1946; lowest 151.82 below lsd, July 10, 1951. Records available: 1946-51. Jan. 24, 136.13; May 22, 145.08; July 10, 151.82; Sept. 27, 145.63; Nov. 21, 148.15; Dec. 26, 143.78.

MI 130. Milwaukee County. Greenfield Park. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, T. 6 N., R. 21 E. Drilled public-supply well in limestone, diameter 10 inches, reported depth 500 feet. Land-surface datum is 788 feet above msl. Highest water level 55.52 below lsd, June 3, 1947; lowest 63.39 below lsd, Sept. 20, 1949. Records available: 1946-51. Jan. 24, 62.20; May 23, 59.56; July 24, 61.32; Sept. 18, 61.45; Nov. 14, 58.97.

MI 132. White Manor Water Cooperative. 52d and West Dakota Sts. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 11, T. 6 N., R. 21 E. Drilled unused artesian well in sandstone and limestone, diameter 12 to 8 to 6 inches, reported depth 1,115 feet. Land-surface datum is 730 feet above msl. Highest water level 190.96 below lsd, June 5, 1947; lowest 243.08 below lsd, Aug. 4, 5, 1951. Records available: 1946-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	229.14	227.50	226.09	226.50	227.87	232.80	239.11	241.18	241.16	235.85	236.64	236.39
2	228.84	227.75	226.14	.....	228.27	232.94	238.80	241.43	241.17	235.07	236.68	236.42
3	228.23	227.75	226.02	.....	228.59	233.08	238.32	242.30	240.80	235.19	236.73	235.94
4	228.41	226.70	226.11	226.16	229.21	233.08	237.23	243.08	240.27	235.78	237.11	233.00
5	228.49	227.66	226.11	226.54	229.79	232.76	236.62	243.08	239.61	236.52	237.23	234.82
6	228.71	227.28	225.38	226.72	230.11	232.58	235.93	242.61	239.30	236.84	237.20	234.67
7	228.71	227.40	225.30	226.82	230.01	232.61	235.28	241.63	239.72	236.84	236.87	234.34
8	228.31	227.67	225.60	226.96	229.64	232.75	234.50	241.49	239.94	236.80	237.08	235.74
9	227.94	227.97	225.91	226.83	229.93	233.24	233.40	241.73	239.87	236.22	237.35	235.93
10	227.99	228.20	225.94	226.47	230.08	233.45	233.00	242.09	239.16	236.10	237.62	235.93
11	228.36	228.28	225.94	226.56	230.26	233.68	232.92	242.50	238.44	236.17	237.62	.....
12	228.70	228.24	225.77	226.59	230.70	233.81	232.76	242.49	238.48	236.47	237.31	236.05
13	228.76	228.61	225.18	226.89	230.75	234.57	232.69	242.00	238.94	236.63	236.49	236.48
14	228.72	228.99	225.15	227.28	230.67	235.19	232.60	241.29	239.23	236.63	236.32	236.54
15	228.26	228.99	225.66	227.55	230.41	235.73	232.56	240.73	239.35	236.28	236.82	237.13
16	228.21	228.72	226.21	227.51	230.96	236.33	232.69	240.63	239.35	235.86	237.16	237.17
17	227.75	228.23	226.63	227.24	231.45	236.34	233.19	240.81	239.00	236.09	237.29	237.09
18	227.70	228.17	226.72	227.00	231.78	236.69	233.56	241.10	238.16	236.23	237.29	236.53
19	227.71	227.42	226.72	227.38	232.21	236.47	234.43	241.13	237.62	236.32	237.10	236.56
20	228.28	226.96	226.37	227.57	232.50	237.54	235.41	240.93	237.50	236.33	236.73	236.11

MI 132--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	228.44	226.62	226.22	227.52	232.73	238.04	235.85	240.21	237.81	236.22	236.29	235.92
22	228.43	226.71	226.18	227.48	232.68	238.26	236.47	240.23	238.12	235.97	236.34	236.24
23	227.60	226.83	226.19	227.39	232.86	238.50	236.59	240.26	238.14	235.76	236.34	236.23
24	227.53	226.75	226.75	226.99	232.93	238.50	236.85	240.18	237.97	236.09	236.12	236.21
25	227.71	226.49	226.86	226.97	232.96	238.50	237.40	240.00	237.26	236.43	236.10	235.63
26	227.74	226.06	226.83	227.40	232.98	238.11	237.81	239.93	236.86	236.74	235.94	234.64
27	228.07	225.80	226.54	227.46	232.98	238.08	238.34	239.66	236.58	236.78	235.94	233.98
28	228.16	225.79	226.86	227.57	232.94	238.49	239.17	239.21	236.73	236.80	235.96	233.35
29	228.15		226.02	227.77	232.65	238.78	239.35	239.55	236.63	236.80	235.06	233.34
30	227.98		226.39	227.77	232.81	239.12	239.69	240.04	236.22	236.31	236.22	233.66
31	227.40		226.27		232.81		240.27	240.80		236.48		233.71

MI 135. Leonard Budzein. 920 West Armour Ave., Town of Lake. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 20, T. 6 N., R. 22 E. Dug irrigation water-table well in sand, reported depth 20 feet, cased to 20. Land-surface datum is 667 feet above msl. Highest water level 6.54 below lsd, Apr. 7, 1948; lowest 12.06 below lsd, Dec. 27, 1946. Records available: 1946-51. Jan. 24, 9.42; May 22, 7.45; June 20, 7.73; Aug. 14, 9.56; Oct. 9, 9.43; Dec. 4, 9.28.

MI 146. Heuel. 9090 Lake Drive, Milwaukee. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 4, T. 8 N., R. 22 E. Drilled unused artesian well in limestone, diameter 5 inches, depth 110 feet. Land-surface datum is 680 feet above msl. Highest water level 58.70 below lsd, June 20, 1946; lowest 68.23 below lsd, Dec. 6, 1949. Records available: 1946-51. Jan. 24, 64.90; May 22, 63.98; Sept. 27, 65.60.

MI 148. Milwaukee County. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 32, T. 6 N., R. 21 E. Drilled unused artesian well in limestone, diameter 5 inches, depth 180 feet. Land-surface datum is 774 feet above msl. Highest water level 25.44 below lsd, May 3, 1951; lowest 34.28 below lsd, Jan. 11, 1950. Records available: 1946-51.

#### Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	32.25	30.48	27.58	26.06	26.86	27.75	29.09	29.91	30.48	30.71	29.84
2	.....	32.30	30.45	27.59	25.86	26.78	27.92	28.87	29.87	30.31	30.70	29.84
3	.....	32.28	.....	27.40	25.62	26.71	27.75	29.01	29.91	30.45	30.53	29.80
4	32.23	32.38	.....	27.37	25.56	26.96	27.90	29.09	29.98	30.55	30.84	29.95
5	32.27	32.40	.....	27.39	25.66	26.78	28.03	29.08	29.86	30.76	30.97	29.93
6	32.28	32.28	.....	27.28	25.83	26.65	28.01	28.89	29.93	30.76	30.81	29.78
7	32.20	.....	29.19	27.00	25.86	26.55	27.97	28.99	30.09	30.71	30.71	30.13
8	32.08	.....	29.10	27.14	25.78	26.57	27.91	29.02	29.98	30.81	30.77	30.26
9	31.99	.....	29.16	27.19	25.91	26.69	28.06	29.16	29.85	30.80	30.73	30.17
10	32.09	.....	29.03	27.11	25.90	26.77	28.13	29.27	29.84	30.78	30.85	30.10
11	32.20	.....	28.78	27.07	25.81	26.84	28.11	29.24	29.99	30.67	30.83	29.87
12	32.26	.....	28.57	26.77	26.14	26.80	28.16	29.33	30.00	30.84	30.52	30.05
13	32.22	.....	28.34	26.77	26.14	26.95	28.17	29.32	30.10	30.80	30.35	.....
14	32.03	.....	28.46	26.79	26.16	27.03	28.22	29.33	30.30	30.71	30.33	.....
15	32.20	32.61	28.61	26.92	26.18	27.00	28.20	29.14	30.36	30.81	30.51	.....
16	32.20	32.33	28.65	26.92	26.12	27.01	28.31	29.20	30.30	30.76	30.39	.....
17	32.12	32.32	.....	26.20	27.08	28.38	29.17	30.22	30.87	30.32	.....	.....
18	32.13	32.32	.....	26.62	26.26	27.17	28.26	29.30	30.23	30.85	30.14	.....
19	32.22	32.39	.....	26.97	26.20	27.16	28.55	29.40	30.20	30.89	30.11	30.14
20	32.50	32.39	.....	26.99	26.21	27.27	28.44	29.37	30.20	30.73	30.02	29.91
21	32.62	32.23	28.31	26.85	26.43	27.34	28.40	29.48	30.33	30.57	29.75	30.14
22	32.46	32.20	.....	26.91	26.44	27.26	28.55	29.61	30.43	30.86	29.82	.....
23	32.13	32.15	.....	27.07	26.50	27.37	28.57	29.63	30.41	30.88	29.95	.....
24	32.17	31.92	.....	26.89	26.44	27.54	28.55	29.55	30.40	30.76	30.04	.....
25	32.33	31.67	.....	26.76	26.41	27.60	28.54	29.49	30.50	30.77	29.95	.....
26	32.28	31.33	.....	26.83	26.41	27.43	28.56	29.43	30.36	30.64	30.05	30.77
27	32.38	31.30	.....	26.64	26.63	27.50	28.60	29.53	30.56	30.62	30.00	.....
28	32.41	31.11	.....	26.41	26.85	27.66	28.72	29.72	30.82	30.61	30.02	.....
29	32.60		27.71	26.34	26.85	27.62	28.80	29.70	30.65	30.56	30.02	.....
30	.....		27.64	26.28	26.93	27.63	28.94	29.68	30.44	30.52	29.94	.....
31	.....		27.61		26.90		28.82	29.79		30.72		.....

MI 153. Lakeside Laboratories. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 11, T. 8 N., R. 21 E. Drilled unused artesian well in sandstone and limestone, diameter 10 inches, reported depth 1,502 feet, cased to 250, 519-762. Land-surface datum is 677 feet above msl. Highest water level 25.08 below lsd, May 21, 1948; lowest 36.40 below lsd, Aug. 28, 1949. Records available: 1948-51. Measurement discontinued.

## MI 153--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	Day	Jan.	Feb.	Mar.	Apr.
1	33.95	33.83	32.97	29.39	17	33.76	34.17	30.69	28.20
2	33.94	33.89	32.96	29.34	18	33.74	34.13	30.56	28.07
3	33.78	33.89	32.37	29.25	19	33.78	34.13	30.45	28.31
4	34.20	33.77	32.37	29.20	20	33.80	34.11	30.38	28.44
5	34.20	33.83	32.35	29.25	21	34.24	34.17	30.54	28.31
6	34.31	33.77	32.00	29.14	22	34.27	34.19	30.32	28.21
7	.....	33.90	31.88	28.87	23	33.77	34.18	30.00	28.38
8	.....	34.01	31.75	28.75	24	33.88	34.06	30.08	28.30
9	.....	34.05	31.81	28.75	25	33.92	33.75	30.13	28.12
10	.....	33.98	31.69	28.72	26	33.94	33.01	30.10	.....
11	34.10	33.50	31.45	28.66	27	33.91	33.29	29.92	.....
12	34.16	33.73	31.15	28.28	28	33.99	33.24	29.66	.....
13	34.12	34.13	30.73	28.16	29	34.14	.....	29.50	.....
14	33.85	34.21	30.57	28.17	30	34.12	.....	29.34	.....
15	33.85	34.53	30.62	28.32	31	33.95	.....	29.37	.....
16	33.85	34.24	30.69	28.25					

MI 229. Andrew J. Albert. 5827 North 40th St., Milwaukee. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 25, T. 8 N., R. 21 E. Drilled unused well in limestone, diameter 6 inches, depth 76 feet. Land-surface datum is 686 feet above msl. Highest water level 23.92 below lsd, Apr. 29, 1951; lowest 35.12 below lsd, Aug. 26, 1949. Records available: 1949-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	30.74	30.93	29.07	26.55	24.50	26.20	27.65	29.30	28.58	28.93	.....	25.92
2	30.69	31.03	29.08	26.51	24.62	25.72	27.90	29.18	28.57	28.81	27.34	25.92
3	30.53	31.03	28.70	26.49	25.12	25.25	27.88	29.40	28.60	28.84	27.31	25.89
4	31.07	31.00	28.43	26.48	24.69	25.38	27.39	29.50	28.62	28.85	27.49	25.79
5	31.07	31.00	28.43	26.64	25.06	25.45	27.62	29.47	28.59	29.12	27.74	25.80
6	31.17	30.97	28.13	26.64	25.18	25.39	27.59	29.15	28.55	29.15	27.75	25.78
7	31.13	31.09	28.03	26.54	25.19	25.35	27.60	28.73	28.78	29.02	27.36	25.95
8	30.89	31.20	28.22	26.27	25.20	25.38	27.57	28.70	28.78	28.78	27.42	26.10
9	30.80	31.20	28.39	26.08	25.48	25.61	27.12	28.95	28.82	28.80	27.46	26.13
10	30.82	31.13	28.39	26.13	25.48	25.71	27.12	29.12	28.68	28.78	27.54	26.10
11	31.04	30.72	28.33	26.18	25.26	26.04	27.19	29.18	28.85	28.75	27.56	25.81
12	31.12	30.93	28.18	25.91	25.57	26.20	27.22	29.15	28.85	28.91	27.31	25.89
13	31.10	31.27	27.78	25.61	25.62	26.25	27.39	28.98	29.00	28.90	26.69	26.20
14	30.92	.....	27.71	25.69	25.69	26.32	27.70	28.78	29.12	28.89	25.69	26.20
15	30.45	31.18	27.81	25.90	25.81	26.50	27.70	28.59	29.20	28.78	26.04	26.30
16	30.90	30.89	27.91	26.08	25.80	26.58	27.71	28.40	29.18	28.87	26.10	26.39
17	30.78	30.99	27.90	26.14	25.72	26.98	27.89	28.40	29.08	28.89	26.13	26.39
18	30.79	30.89	27.82	26.08	25.68	27.12	27.75	28.41	29.06	28.60	26.14	26.20
19	30.86	30.56	27.47	25.95	25.80	27.11	27.88	28.41	29.20	28.30	26.22	26.22
20	31.10	30.52	27.36	25.98	25.90	26.92	27.94	28.22	29.18	28.12	26.19	26.00
21	31.29	30.38	27.41	25.98	26.09	26.95	27.93	27.99	29.21	27.80	25.93	26.00
22	31.22	30.37	27.40	25.83	26.09	26.70	27.85	28.20	29.21	27.78	25.86	26.38
23	30.73	30.34	27.19	25.93	26.04	26.59	29.94	28.32	29.21	27.78	25.93	26.61
24	30.90	30.26	27.58	25.87	26.09	26.67	28.15	28.42	29.25	.....	26.13	26.68
25	30.93	30.02	26.71	25.69	26.08	26.73	28.53	28.40	29.26	.....	26.11	26.62
26	30.92	29.37	27.57	24.33	25.90	26.72	28.59	28.34	29.15	.....	26.13	26.71
27	31.09	29.13	27.22	24.21	25.84	26.80	28.55	28.19	29.00	.....	26.13	26.77
28	31.14	29.11	27.00	24.39	25.99	26.93	28.63	28.30	29.20	.....	26.10	26.70
29	31.24	.....	26.71	24.39	26.15	26.96	28.58	28.37	29.19	.....	26.10	26.20
30	31.20	.....	26.38	24.26	26.44	27.30	28.73	28.37	29.05	.....	26.01	26.35
31	31.10	.....	26.49	.....	26.42	29.22	28.50	.....	.....	.....	.....	26.31

MI 230. E. Runge. 4723 West Villard Ave., Milwaukee. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 8 N., R. 21 E. Drilled unused well, diameter 6 inches, depth 83 feet. Highest water level 7.67 below lsd, May 22, 1951; lowest 17.52 below lsd, July 26, 1949. Records available: 1949-51. May 22, 7.67; July 10, 8.86; Sept. 11, 11.34; Nov. 6, 9.13; Dec. 26, 7.97.

MI 231. R. J. Cerletty. 8900 North 76th St., Milwaukee. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 3, T. 8 N., R. 21 E. Drilled domestic artesian well in limestone, diameter 6 inches, depth 80 feet, cased to 58. Land-surface datum is 695 feet above msl. Highest water level 9.03 below lsd, May 22, 1951; lowest 12.22 below lsd, Sept. 11, 1951. Records available: 1949-51. May 22, 9.03; July 10, 10.10; Sept. 11, 12.22; Nov. 6, 10.98.

MI 232. Milwaukee House of Correction. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, T. 5 N., R. 21 E. Drilled industrial artesian well in sandstone, diameter 22 to 16 inches, reported depth 1,842 feet, cased to 640. Land-surface datum is 761 feet above msl. Highest water level 177.5 below lsd, May 4, 1950; lowest 196.5 below lsd, May 22, 1951. Records available: 1950-51. Jan. 24, 189.5; May 22, 196.5; July 31, 186.5; Sept. 18, 191.5.

#### Monroe County

Mo 1. Nicholas Moran. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 1, T. 17 N., R. 1 W. Drilled stock water-table well in sand, diameter 6 inches, reported depth 12 feet. Highest water level 2.39 below lsd, Apr. 20, 1951; lowest 5.72 below lsd, Sept. 29, 1949. Records available: 1947-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 5, 1947	2.62	June 3, 1949	4.10	Apr. 5, 1950	3.07	Feb. 15, 1951	4.21
June 16, 1948	4.42	Aug. 12	5.20	June 7	3.70	Apr. 20	2.39
Dec. 8	3.80	Sept. 29	5.72	July 21	2.97	July 20	3.23
Jan. 13, 1949	3.99	Dec. 15	4.87	Oct. 5	4.83	Sept. 27	4.49
Mar. 10	2.89	Mar. 2, 1950	4.65	Dec. 15	4.43	Nov. 29	3.20
Apr. 29	2.51						

Mo 2. Joseph Anderson. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 34, T. 15 N., R. 4 W. Drilled unused well in sandstone, diameter 5 inches, depth 44 feet. Land-surface datum is 1,100 feet above msl. Highest water level 6.53 below lsd, Apr. 25, 1948; lowest 15.83 below lsd, Mar. 11, 1940. Records available: 1934-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	14.72	Apr. 26	7.52	July 26	7.52	Oct. 20	9.25
Feb. 25	15.10	May 27	8.97	Aug. 26	8.54	Nov. 26	10.09
Mar. 25	15.06	June 24	9.47	Sept. 26	10.27	Dec. 24	11.18
Apr. 19	8.92						

Mo 10. Lester Cooley. Formerly Dennis Shea. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 5, T. 15 N., R. 3 W. Drilled unused water-table well in sand, diameter 7 inches, depth 17 feet, cased to 17. Land-surface datum is 880 feet above msl. Highest water level 1.80 below lsd, Apr. 27, 1951; lowest 11.09 below lsd, Aug. 27, 1949. Records available: 1934-51.

Date	Water level						
Jan. 1	11.00	Mar. 28	9.21	June 26	10.00	Oct. 29	6.59
27	10.99	Apr. 27	1.80	July 24	5.20	Nov. 29	6.08
Feb. 26	10.59	May 28	9.43	Aug. 29	10.38	Dec. 27	8.08

Mo 11. John Sullivan. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 27, T. 16 N., R. 3 W. Drilled unused water-table well in sandstone, diameter 7 inches, depth 11 feet. Land-surface datum is 925 feet above msl. Highest water level 3.90 below lsd, June 29, 1947; lowest 7.53 below lsd, June 7, 1950. Records available: 1934-51. Feb. 28, 5.40; Mar. 29, 5.45; Apr. 29, 5.45; May 29, 5.45; June 29, 5.60; Aug. 29, 6.70; Sept. 29, 5.75.

Mo 12. Melvin Olson. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 32, T. 16 N., R. 4 W. Drilled unused well, diameter 6 inches, depth 31 feet, cased to 31. Land-surface datum is 1,020 feet above msl. Highest water level 26.87 below lsd, Mar. 31, 1951; lowest 28.03 below lsd, Feb. 5, 1941. Records available: 1934-51. Mar. 31, 26.87; Apr. 30, 26.89; June 30, 26.90.

Mo 13. Walter Parks. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 3, T. 16 N., R. 4 W. Drilled unused well in sand, diameter 8 inches, depth 13 feet, cased to 13. Land-surface datum is 780 feet above msl. Highest water level 6.77 below lsd, May 22, 1945; lowest 11.11 below lsd, Nov. 8, 1950. Records available: 1934-51.

Feb. 26	10.20	May 24	10.72	July 4	10.76	Sept. 23	10.80
Mar. 3	10.76	June 12	10.37	Aug. 15	10.74	Dec. 3	10.90
Apr. 4	10.20	26	10.27				

Mo 17. U. S. Army, Camp McCoy. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 18 N., R. 2 W. Drilled unused artesian well in sandstone, diameter 9 inches, depth 192 feet, cased to 109. Highest water level 2.12 below lsd, May 5, 1951; lowest 5.42 below lsd, Feb. 7, 1951. Records available: 1949-51.

#### Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.95	5.28	4.90	3.80	2.46	2.78	2.90	3.15	3.45	3.62	3.21	3.51
2	5.00	5.35	4.80	3.87	2.47	2.83	2.90	3.20	3.33	3.66	3.20	3.41
3	5.03	5.24	4.66	3.78	2.45	2.66	2.94	3.24	3.27	3.65	3.12	3.38
4	5.06	5.27	4.65	3.84	2.30	2.57	....	3.27	3.29	3.64	3.14	3.54
5	5.11	5.27	4.57	3.77	2.23	2.60	....	3.09	3.39	3.61	3.15	3.52

## Mo 17--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	5.12	5.38	4.63	3.70	2.25	2.58	....	3.12	3.37	3.60	3.19	3.46
7	5.05	5.42	4.61	3.56	2.21	2.58	....	3.17	3.47	3.36	3.16	3.64
8	5.05	5.35	4.56	3.45	2.60	2.55	....	3.27	3.45	3.35	3.14	3.64
9	5.15	5.39	4.57	3.36	2.65	2.60	....	3.28	3.36	3.37	3.17	3.47
10	5.15	5.32	4.57	3.29	2.53	2.54	....	3.28	3.34	3.38	3.27	3.44
11	5.15	5.27	4.45	3.25	2.50	2.47	....	3.23	3.45	3.36	3.23	3.51
12	5.15	5.40	4.44	3.12	2.59	2.57	....	3.20	3.49	3.38	3.11	3.55
13	5.14	5.42	4.45	3.01	2.52	2.62	....	3.20	3.49	3.39	3.12	3.60
14	5.03	5.38	4.49	2.98	2.54	2.70	....	3.30	3.50	3.26	3.17	3.60
15	5.15	5.32	4.52	2.82	2.54	2.69	....	3.30	3.54	3.37	3.37	3.64
16	5.12	5.35	4.63	2.85	2.65	2.73	....	3.30	3.45	3.40	3.39	3.59
17	5.15	5.42	4.56	2.80	2.59	2.68	....	3.30	3.40	3.46	3.37	3.55
18	5.19	5.28	4.44	2.84	2.62	2.67	....	3.36	3.54	3.45	3.22	3.56
19	5.19	5.37	4.50	2.80	2.67	2.75	....	3.24	3.55	3.44	3.23	3.63
20	5.26	5.38	4.54	2.76	2.53	2.77	2.90	3.25	3.57	3.41	3.26	3.55
21	5.21	5.39	4.48	2.69	2.59	2.88	3.01	3.35	3.62	3.31	3.23	3.60
22	5.11	5.37	4.52	2.57	2.72	2.85	2.97	3.41	3.55	3.33	3.35	3.62
23	5.20	5.32	4.54	2.64	2.74	2.93	3.00	3.40	3.50	3.30	3.25	3.60
24	5.22	5.35	4.56	2.62	2.73	2.84	3.07	3.43	3.55	3.27	3.34	3.58
25	5.22	5.28	4.48	2.64	2.72	2.90	3.13	3.42	3.59	3.29	3.24	3.60
26	5.25	5.27	4.43	2.66	2.70	2.83	3.13	3.27	3.63	3.19	3.36	3.67
27	5.25	5.15	4.42	2.61	2.60	2.93	3.17	3.35	3.68	3.26	3.35	3.67
28	5.20	4.98	4.29	2.57	2.65	2.94	3.18	3.36	3.68	3.06	3.34	3.58
29	5.20	.....	4.08	2.42	2.75	2.93	3.00	3.40	3.67	3.07	3.38	3.60
30	5.23	.....	4.04	2.53	2.81	2.92	3.05	3.43	3.57	3.18	3.68	3.63
31	5.27	.....	3.94	.....	2.74	.....	3.10	3.38	.....	3.25	.....	3.62

Oconto County

Oc 1. Oconto Utilities. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 19, T. 28 N., R. 22 E. Drilled unused artesian well in sandstone, diameter 6 inches. Land-surface datum is 591 feet above msl. Highest water level 1.16 below lsd, Nov. 9, 1948; lowest 17.25 below lsd, Aug. 22, 1946. Records available: 1946-51. Feb. 2, 3.45; Sept. 20, 3.10.

Oneida County

On 22. Wisconsin Valley Improvement Co. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 18, T. 39 N., R. 8 E. Jetted unused water-table well in gravel, diameter 6 inches, depth 27 feet. Land-surface datum is 1,607 feet above msl. Highest water level 13.04 below lsd, Dec. 20, 1951; lowest 19.29 below lsd, Apr. 9, 1949. Records available: 1944-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.89	.....	17.49	17.78	16.54	14.62	13.79	13.75	14.16	14.04	13.38	.....
2	16.92	.....	17.50	17.79	16.44	14.61	13.79	13.71	14.16	13.96	.....	.....
3	16.91	.....	17.49	17.79	16.34	14.53	13.79	13.80	14.18	.....	.....	.....
4	16.93	.....	17.53	17.81	16.26	14.53	13.77	13.81	14.18	.....	.....	.....
5	16.95	.....	17.54	17.81	16.17	14.49	13.77	13.80	14.18	.....	.....	.....
6	16.96	.....	17.56	17.81	16.12	14.41	13.75	13.77	14.24	.....	.....	.....
7	.....	.....	17.56	17.81	16.02	14.36	13.70	13.78	14.25	.....	.....	.....
8	16.94	.....	17.59	17.80	15.94	14.30	13.66	13.80	14.24	.....	.....	.....
9	16.94	.....	17.61	17.80	15.89	14.27	13.71	13.87	14.21	.....	.....	.....
10	16.95	.....	17.61	17.79	15.86	14.26	13.74	13.88	14.17	.....	.....	.....
11	16.98	.....	17.61	17.78	15.75	14.23	13.74	13.90	14.23	.....	.....	.....
12	16.99	17.29	17.61	17.72	15.70	14.21	13.69	13.91	14.23	.....	.....	.....
13	16.99	17.29	17.62	17.67	15.68	14.19	13.69	13.91	14.23	.....	13.20	.....
14	16.98	.....	17.62	17.62	15.62	14.18	13.69	13.91	14.24	.....	13.24	.....
15	16.99	17.30	17.64	17.56	15.57	14.13	13.68	13.91	14.24	.....	13.36	.....
16	17.00	17.27	17.67	17.54	15.15	14.10	13.69	13.92	14.24	.....	.....	.....
17	17.00	17.30	17.68	17.47	15.47	14.10	13.69	13.94	14.23	.....	.....	.....
18	17.03	17.31	17.68	17.38	15.37	14.09	13.64	13.96	14.23	.....	.....	.....
19	17.03	17.34	17.69	17.33	15.30	14.08	13.63	13.96	14.22	.....	.....	.....
20	17.03	17.35	17.71	17.30	15.20	14.07	13.63	13.97	14.26	.....	.....	13.14
21	17.03	17.37	17.71	17.21	15.19	14.07	13.66	14.04	14.26	.....	.....	13.20
22	17.02	17.38	17.72	17.10	15.13	14.02	13.69	14.11	14.26	13.52	.....	13.31
23	17.03	17.40	17.74	17.09	15.08	13.98	13.68	14.07	14.27	13.52	.....	.....
24	17.08	17.40	17.75	17.03	14.98	13.97	13.68	14.05	14.30	13.45	.....	.....
25	17.09	17.40	17.77	16.96	14.92	14.00	13.67	14.05	14.30	13.39	.....	13.26

On 22--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	17.09	17.44	17.77	16.91	14.88	13.88	13.68	14.06	14.29	13.39	.....	13.32
27	17.10	17.47	17.72	16.84	14.82	13.85	13.69	14.07	14.28	13.39	.....	13.32
28	.....	17.47	17.74	16.71	14.82	13.83	13.70	14.10	14.27	.....	.....	13.20
29	.....	.....	17.74	16.68	14.76	13.82	13.71	14.11	14.22	.....	.....	13.19
30	.....	.....	17.75	16.64	14.71	13.80	13.70	14.11	14.08	13.30	.....	13.26
31	.....	.....	17.77	16.68	14.68	13.71	13.71	14.16	.....	13.39	.....	13.26

On 23. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, T. 37 N., R. 6 E. Driven unused water-table well in sand, diameter 1 $\frac{1}{4}$  inches, depth 37 feet, cased to 37, well point. Land-surface datum is 1,529 feet above msl. Highest water level 27.86 below lsd, Dec. 19, 1951; lowest 32.96 below lsd, June 26, 1949. Records available: 1944-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	31.51	Mar. 27	31.85	June 19	30.51	Oct. 12	28.75
10	31.58	Apr. 3	31.88	28	30.79	27	28.50
17	31.61	20	31.85	July 10	31.12	31	28.51
26	31.65	27	31.65	20	30.01	Nov. 9	28.34
31	31.68	May 2	31.63	Aug. 6	29.50	15	28.33
Feb. 14	31.77	15	31.29	21	29.38	28	28.15
23	31.80	25	31.09	Sept. 7	29.17	Dec. 14	27.88
28	31.84	June 7	31.03	19	29.02	19	27.86
Mar. 10	32.03	12	30.69	27	29.01	26	27.98
23	32.05						

On 24. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 36 N., R. 9 E. Driven unused water-table well in sand, diameter 1 $\frac{1}{4}$  inches, depth 33 feet, cased to 33, well point. Highest water level 18.89 below lsd, Aug. 29, 1951; lowest 22.20 below lsd, Mar. 20, 1949. Records available: 1944-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	21.54	Apr. 11	21.35	July 9	19.87	Oct. 10	19.18
12	21.57	18	21.19	18	19.86	16	19.15
21	21.65	25	20.90	22	19.47	23	19.20
26	21.70	May 1	20.70	31	20.40	30	19.12
Feb. 2	21.75	10	20.58	Aug. 8	19.15	Nov. 4	19.22
10	21.78	15	20.55	14	18.90	14	19.23
19	21.84	24	20.53	23	18.94	21	19.27
27	21.85	30	20.50	29	18.89	28	19.25
Mar. 8	21.86	June 7	20.24	Sept. 9	19.00	Dec. 2	19.25
17	21.95	14	20.16	17	19.09	17	19.35
29	21.95	22	20.07	25	19.01	26	19.62
Apr. 4	21.67	July 1	20.98	Oct. 1	19.15	31	19.70

#### Outagamie County

On 2. City of Kaukauna. Kaukauna Water & Electric Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 24, T. 21 N., R. 18 E. Drilled unused artesian well in sandstone and limestone, diameter 12 inches, reported depth 798 feet, cased to 100. Land-surface datum is 645 feet above msl. Highest water level 6.44 above lsd, Apr. 7, 1947; lowest 30.15 below lsd, Aug. 2, 1951. Records available: 1946-51.

#### Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	13.82	11.29	11.69	19.74	22.38	30.11	24.11	25.58	.....	.....
2	.....	.....	14.32	10.90	13.37	20.27	22.59	30.15	21.16	25.96	.....	.....
3	.....	.....	14.05	12.05	14.31	20.05	22.58	.....	20.96	26.05	.....	.....
4	.....	.....	13.46	12.37	14.12	20.40	22.11	29.27	23.53	26.65	.....	21.29
5	.....	.....	12.90	12.62	12.53	.....	21.94	18.12	28.04	24.05	27.14	.....
6	.....	13.74	13.31	12.72	11.51	22.04	20.62	27.50	24.90	26.82	.....	21.04
7	.....	14.17	14.67	12.40	13.23	21.71	21.50	28.00	25.68	26.13	.....	21.71
8	.....	14.70	15.07	9.33	14.39	21.20	21.50	28.51	.....	25.47	.....	21.71
9	.....	15.14	14.98	9.80	15.59	21.12	.....	28.80	25.08	25.91	.....	21.00
10	.....	14.86	14.59	11.40	15.75	20.52	23.12	28.57	25.15	25.77	.....	20.87
11	.....	10.95	10.91	12.02	16.00	21.76	.....	28.73	25.88	.....	.....	.....
12	.....	13.65	12.38	12.00	15.87	21.70	24.54	28.60	27.10	.....	.....	21.46
13	.....	15.79	13.34	11.84	14.60	.....	24.13	28.18	27.13	.....	.....	.....
14	.....	15.73	.....	11.89	16.51	.....	24.40	.....	27.57	.....	.....	21.86
15	.....	15.45	.....	8.96	17.92	.....	24.38	28.47	27.66	.....	.....	21.85

## Ou 2--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	.....	15.40	.....	9.93	18.40	.....	24.40	28.50	26.00	.....	.....	.....
17	.....	15.22	.....	11.50	17.64	.....	25.18	28.35	25.16	.....	.....	21.69
18	.....	10.43	.....	12.10	18.56	.....	25.06	28.15	26.70	.....	.....	21.69
19	.....	11.60	.....	.....	19.14	23.64	25.70	26.53	.....	.....	.....	21.69
20	.....	12.69	.....	12.96	19.19	.....	26.38	27.42	27.74	.....	.....	21.73
21	.....	13.50	13.42	12.78	.....	23.90	26.32	28.08	27.80	.....	.....	21.42
22	.....	13.81	13.21	8.39	19.49	23.90	25.03	28.84	27.19	.....	.....	21.26
23	.....	14.46	13.17	10.17	19.40	23.59	26.05	29.31	25.58	.....	.....	21.24
24	.....	14.40	13.19	11.10	19.70	23.59	.....	.....	26.08	.....	.....	.....
25	.....	10.43	10.20	11.74	20.07	23.12	27.88	29.25	26.54	.....	.....	.....
26	.....	11.34	10.49	12.43	20.01	23.10	28.39	27.94	26.51	.....	.....	.....
27	.....	11.65	12.30	18.03	23.53	28.42	26.15	26.32	.....	.....	.....	.....
28	.....	12.86	12.64	12.14	19.10	23.80	28.69	.....	26.82	.....	.....	.....
29	.....	.....	12.82	8.72	19.85	23.79	28.70	26.28	26.54	.....	.....	.....
30	.....	.....	13.40	9.40	20.06	23.44	28.06	25.96	24.97	.....	.....	.....
31	.....	.....	13.21	.....	19.96	.....	28.76	25.27	.....	.....	.....	.....

Ou 3. Vanden Huefel. SE<sub>4</sub>NE<sub>4</sub> sec. 2, T. 23 N., R. 18 E. Drilled stock artesian well in sandstone, diameter 5 inches, depth 110 feet. Highest water level 22.80 below lsd, May 23, 1948; lowest 39.07 below lsd, Sept. 21, 1950. Records available: 1947-51. Sept. 20, 37.88; Dec. 6, 35.54.

Ou 5. Kaukauna Water & Electric Co. SW<sub>4</sub>SE<sub>4</sub> sec. 4, T. 21 N., R. 19 E. Drilled domestic artesian well in sandstone and limestone, diameter 6 inches, reported depth 408 feet, cased to 68. Land-surface datum is 660 feet above msl. Highest water level 18.27 below lsd, Mar. 29, 1948; lowest 29.13 below lsd, Sept. 19, 1951. Records available: 1947-51. Apr. 11, 25.19; July 9, 27.01; Sept. 19, 29.13; Dec. 4, 28.57.

Portage County

Pt 1. Newton and Emery Bade. SE<sub>4</sub>SW<sub>4</sub> sec. 27, T. 24 N., R. 6 E. Drilled unused water-table well in sand, diameter 6 inches, depth 36 feet. Highest water level 13.04 below lsd, Nov. 7, 1951; lowest 19.90 below lsd, Mar. 6, 1951. Records available: 1950-51. Mar. 6, 19.90; May 2, 14.39; July 10, 14.40; Aug. 28, 14.61; Nov. 7, 13.04.

Pt 6. N. Weisbrot. SE<sub>4</sub>NW<sub>4</sub>E<sub>2</sub> sec. 31, T. 24 N., R. 9 E. Driven water-table well in sand, diameter 2 inches, depth 22 feet. Highest water level 11.96 below lsd, May 2, 1951; lowest 15.60 below lsd, Mar. 6, 1951. Records available: 1950-51. Mar. 6, 15.60; May 2, 11.96; July 11, 12.26; Aug. 29, 12.61; Nov. 7, 12.67.

Pt 15. Lawrence Krogwold. NE<sub>4</sub>SW<sub>4</sub> sec. 28, T. 24 N., R. 10 E. Driven unused water-table well in sand, diameter 2 inches, depth 53 feet. Highest water level 34.51 below lsd, Sept. 2, 16, 1951; lowest 36.55 below lsd, Mar. 29, 1951. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	36.12	Mar. 29	36.55	June 6	34.80	Sept. 2	34.51
27	36.25	Apr. 6	35.94	17	34.80	16	34.51
Feb. 13	36.35	11	35.57	July 2	34.80	25	34.52
25	36.45	20	35.17	11	34.81	Oct. 7	34.51
Mar. 4	36.50	May 3	34.93	20	34.71	17	34.59
11	36.52	14	34.86	Aug. 5	34.62	Nov. 11	34.59
19	36.54	27	34.80	19	34.52	Dec. 16	34.59

Pt 28. J. Burns. SW<sub>4</sub>SW<sub>4</sub> sec. 15, T. 21 N., R. 9 E. Drilled irrigation water-table well in gravel, diameter 12 inches, reported depth 112 feet, cased to 92, screen 92-112. Highest water level 74.32 below lsd, Aug. 11, 1950; lowest 75.75 below lsd, Oct. 19, 1950. Records available: 1950-51. Mar. 7, 75.20; May 3, 74.81; July 12, 74.82; Aug. 30, 74.83; Nov. 7, 74.96.

Pt 30. U. S. Geol. Survey. SE<sub>4</sub>NW<sub>4</sub> sec. 1, T. 22 N., R. 8 E. Driven unused water-table well in sand, diameter 1½ inches, depth 23 feet, cased to 23, well point. Highest water level 7.77 below lsd, July 14, 1946; lowest 14.61 below lsd, Jan. 8, 1951. Records available: 1944-51.

Jan. 8	14.61	Jan. 28	14.45	May 3	11.52	Aug. 8	10.85
14	14.58	Feb. 4	14.33	23	11.14	30	10.89
16	14.18	Mar. 7	14.45	July 11	10.90	Nov. 8	10.84
21	14.47						

Pt 34. U. S. Geol. Survey. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, T. 23 N., R. 7 E. Driven unused water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 22 feet, cased to 20, well point. Highest water level 14.46 below lsd, July 22, 29, 1951; lowest 18.49 below lsd, Mar. 18, 1951. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	18.44	Apr. 8	17.35	July 8	15.07	Oct. 8	15.46
14	17.94	16	16.54	15	14.73	15	15.09
21	18.03	22	16.12	22	14.46	21	15.02
28	18.08	29	15.79	29	14.46	28	14.99
Feb. 4	18.15	May 6	15.63	Aug. 5	14.59	Nov. 4	14.95
11	18.21	13	15.56	12	14.70	11	14.86
18	18.26	20	15.51	19	14.75	18	14.92
25	18.31	27	15.45	26	14.76	25	14.66
Mar. 4	18.34	June 3	15.41	Sept. 2	14.81	Dec. 2	14.71
7	18.40	10	15.33	10	14.80	9	14.77
11	18.38	19	15.24	16	14.92	16	14.82
18	18.49	24	15.19	23	14.98	23	14.87
25	18.28	July 1	15.12	30	15.03	30	14.82
Apr. 1	17.51						

Pt 40. U. S. Geol. Survey. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 24 N., R. 8 E. Driven unused water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 13 feet, cased to 11, well point. Highest water level 3.66 below lsd, May 2, 1951; lowest 10.19 below lsd, Mar. 6, 1951. Records available: 1950-51. Mar. 6, 10.19; May 2, 3.66; May 15, 4.52; July 10, 3.85; Aug. 28, 6.40; Oct. 31, 6.56.

Pt 41. U. S. Geol. Survey. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 35, T. 21 N., R. 7 E. Driven unused water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 12 feet, cased to 12, well point. Highest water level 0.40 below lsd, Apr. 14, 1951; lowest 6.01 below lsd, Feb. 23, 1951. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	5.86	Apr. 14	0.40	July 14	2.38	Oct. 6	2.68
18	5.90	21	.87	21	1.90	13	3.10
25	5.94	28	.78	28	2.66	27	2.25
25	5.93	May 5	1.04	Aug. 4	3.03	Nov. 1	2.83
Feb. 9	5.99	12	1.76	11	2.40	3	2.45
16	6.01	19	2.07	18	1.80	10	2.50
23	6.01	26	1.80	25	2.38	17	2.19
Mar. 2	5.00	June 2	1.52	Sept. 1	2.79	24	2.22
9	4.79	9	2.20	8	3.00	Dec. 1	2.11
16	4.44	16	2.62	15	3.25	15	3.20
23	4.40	23	2.73	22	3.32	22	3.06
30	2.50	30	2.28	29	3.39	29	3.12
Apr. 6	.50	July 7	2.22				

Pt 42. U. S. Geol. Survey. NE $\frac{1}{4}$ NW $\frac{1}{4}$ W $\frac{1}{2}$  sec. 30, T. 23 N., R. 9 E. Driven unused water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 17 feet, cased to 15, well point. Highest water level 6.11 below lsd, Oct. 19, 1950; lowest 10.20 below lsd, Mar. 7, 1951. Records available: 1950-51. Jan. 16, 10.19; Mar. 7, 10.20; May 2, 7.96; July 11, 7.24; Aug. 29, 7.39; Nov. 8, 7.39.

Pt 79. U. S. Geol. Survey. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 35, T. 21 N., R. 10 E. Driven unused water-table well in sand and gravel, diameter 1 $\frac{1}{4}$  inches, depth 17 feet, cased to 17, well point. Highest water level 14.82 below lsd, Nov. 7, 1951; lowest 14.87 below lsd, Aug. 30, 1951. Records available: 1951. Aug. 30, 14.87; Nov. 7, 14.82.

#### Price County

Pr 6. Wisconsin Conservation Department. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 24, T. 40 N., R. 1 E. Jetted unused water-table well in sand and gravel, diameter 8 inches, reported depth 15 feet, cased to 15. Land-surface datum is 1,490 feet above msl. Highest water level 0.41 below lsd, June 29, 1946; lowest 5.67 below lsd, Oct. 31, 1948. Records available: 1937-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	4.00	Feb. 17	4.36	Apr. 7	0.14	May 26	0.52
6	4.15	24	2.58	14	.64	31	1.15
13	4.15	28	1.96	21	.62	June 1	1.15
20	4.15	Mar. 1	1.96	28	.52	9	1.86
27	4.20	10	1.31	30	.57	16	2.55
31	4.22	17	1.71	May 1	.57	23	1.00
Feb. 1	4.22	24	2.02	5	1.49	30	1.51
3	4.23	31	1.22	12	2.37	July 8	.40
10	4.24	Apr. 4	1.22	17	1.65	14	1.35

## Pr 6--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 21	1.68	Aug. 31	0.71	Oct. 20	1.78	Nov. 30	1.38
28	1.73	Sept. 10	.53	27	1.40	Dec. 1	1.38
31	1.74	22	1.29	31	1.31	8	.99
Aug. 4	2.22	29	1.43	Nov. 3	1.26	16	1.61
11	1.75	30	1.44	10	1.55	22	1.94
18	1.97	Oct. 6	1.31	17	1.00	29	1.86
25	2.21	13	1.70	24	1.29	31	1.81

Racine County

Ra 3. City of Burlington. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 32, T. 3 N., R. 19 E. Drilled unused artesian well in sandstone and limestone, diameter 8 inches, reported depth 1,008 feet. Land-surface datum is 766 feet above msl. Highest water level 11.42 below lsd, May 21, 1951; lowest 20.60 below lsd, Dec. 5, 1949. Records available: 1946-51. Jan. 23, 13.83; May 21, 11.42; July 24, 11.90; Oct. 2, 12.80; Dec. 11, 12.37.

Ra 4. Pure Milk Association. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, T. 3 N., R. 20 E. Drilled industrial well in limestone, diameter 6 inches, reported depth 200 feet. Land-surface datum is 824 feet above msl. Highest water level 48.86 below lsd, Dec. 11, 1951; lowest 51.17 below lsd, Apr. 3, 1950. Records available: 1946-51. Jan. 23, 49.67; Oct. 3, 44.57; Dec. 11, 42.86.

Ra 5. Chicago, Milwaukee, St. Paul & Pacific Railroad Co. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 3 N., R. 22 E. Drilled railroad artesian well in sandstone and limestone, diameter 12 inches, reported depth 1,810 feet, cased to 586, 976-1083, plugged 1,176. Land-surface datum is 730 feet above msl. Highest water level 109.00 below lsd, July 29, 1946; lowest 129.78 below lsd, July 24, 1950. Records available: 1946-51. Jan. 23, 127.83; May 21, 128.60; July 24, 129.51; Oct. 3, 128.89; Dec. 11, 130.36.

Ra 6. Leroy Radtke. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 4 N., R. 23 E. Drilled domestic well, diameter 4 inches, reported depth 115 feet, cased to 100. Highest water level 18.38 below lsd, July 10, 1947; lowest 28.76 below lsd, Sept. 29, 1948. Records available: 1946-51. July 3, 22.93; Aug. 21, 26.79. Measurement discontinued.

Ra 8. Harold Wollmer. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 10, T. 4 N., R. 21 E. Drilled domestic well, diameter 5 inches, reported depth 368 feet, cased to 136. Highest water level 63.18 below lsd, June 10, 1947; lowest 71.54 below lsd, July 3, 1951. Records available: 1946-51. Jan. 24, 67.49; May 22, 66.34; July 3, 71.54; Aug. 21, 69.46; Oct. 23, 66.76; Dec. 12, 67.98.

Ra 14. Kilbourn Club. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 30, T. 4 N., R. 22 E. Drilled industrial artesian well in sandstone, diameter 10 to 8 inches, reported depth 1,025 feet, cased to 540. Highest water level 159.05 below lsd, Sept. 13, 1950; lowest 167.41 below lsd, Oct. 23, 1951. Records available: 1950-51. Jan. 24, 163.89; May 22, 166.11; Aug. 21, 165.82; Oct. 23, 167.41; Dec. 12, 164.82.

Rock County

Ro 3. School for the Blind. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 2, T. 2 N., R. 12 E. Drilled unused artesian well in sandstone, diameter 10 inches, reported depth 470 feet, cased to 113. Land-surface datum is 824 feet above msl. Highest water level 55.62 below lsd, Dec. 11, 1951; lowest 59.07 below lsd, Sept. 29, 1948. Records available: 1947-51. Jan. 23, 57.46; May 21, 55.84; July 24, 56.49; Oct. 3, 57.22; Dec. 11, 55.62.

St. Croix County

SC 2. Casey Estate. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 31, T. 28 N., R. 19 W. Drilled unused well, diameter 5 inches. Highest water level 46.44 below lsd, Oct. 17, 1947; lowest 52.89 below lsd, Apr. 19, 1951. Records available: 1947-51. Apr. 19, 52.89; July 19, 52.41; Sept. 26, 51.06; Nov. 28, 50.41.

Sauk County

Sk 1. Badger Ordnance Works. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 3, T. 10 N., R. 6 E. Drilled unused artesian well in sandstone, diameter 16 inches, reported depth 435 feet, cased to 208. Land-surface datum is 917 feet above msl. Highest water level 62.75 below lsd, Dec. 31, 1951; lowest 85.30 below lsd, May 11, 1951. Records available: 1946-51.

Sk 1--Continued.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	77.48	78.96	79.72	80.94	82.86	76.57	67.45	67.31	65.68	65.12	64.52	63.69
2	76.77	79.58	80.00	80.74	83.50	75.72	67.42	67.03	65.68	64.97	64.53	63.65
3	76.35	79.58	80.45	79.77	83.98	74.81	67.32	67.02	65.69	64.92	64.35	64.51
4	77.38	79.31	80.45	79.93	84.08	74.24	67.18	66.99	65.69	64.93	64.36	63.49
5	78.28	78.75	80.04	80.80	84.19	73.69	67.29	66.90	65.63	65.07	64.48	63.50
6	79.14	78.06	79.33	80.99	84.36	73.10	67.18	66.67	65.60	65.13	64.48	63.38
7	79.59	78.82	79.83	81.16	84.24	72.52	67.04	66.55	65.65	65.02	64.25	63.69
8	79.83	79.49	80.57	81.16	84.29	71.97	66.87	66.44	65.61	65.07	64.23	63.64
9	80.20	79.99	81.01	80.65	84.80	71.59	66.87	66.47	65.46	65.02	64.21	63.65
10	80.65	80.00	81.01	79.61	85.09	71.25	68.18	66.50	65.27	65.06	64.27	63.62
11	81.13	79.46	80.55	79.66	85.30	70.88	69.87	66.46	65.35	64.93	64.27	63.39
12	81.44	78.62	79.54	79.80	85.29	70.54	71.42	66.51	65.29	65.00	64.09	63.50
13	81.45	78.45	78.44	79.77	85.24	70.24	72.10	66.40	65.34	64.99	63.87	63.59
14	80.79	79.01	79.01	80.39	85.01	70.07	72.17	66.34	65.41	64.92	63.85	63.57
15	79.55	79.45	79.79	79.71	80.52	84.74	69.79	71.90	66.44	65.42	64.87	64.05
16	78.84	79.90	80.27	80.33	84.54	69.48	71.46	66.14	65.42	64.88	64.18	63.63
17	79.23	80.00	80.50	79.66	84.30	69.32	71.00	66.05	65.36	64.88	64.21	63.57
18	79.85	79.84	80.38	79.94	84.09	69.12	70.51	66.08	65.34	64.87	64.17	63.40
19	80.25	78.94	79.74	80.57	83.88	68.94	70.02	66.04	65.27	64.86	64.19	63.41
20	80.25	78.43	79.05	80.99	83.69	68.71	69.67	65.96	65.23	64.71	64.13	63.10
21	79.34	79.78	79.55	81.14	83.68	68.63	69.20	65.97	65.21	64.48	63.89	63.11
22	79.49	79.42	79.94	81.27	83.66	68.41	68.81	66.01	65.18	64.64	63.89	63.25
23	78.43	80.02	80.45	80.97	83.62	68.26	68.66	66.04	65.20	64.67	63.92	63.42
24	79.06	80.04	80.82	80.12	83.49	68.15	68.39	65.99	65.22	64.53	64.00	63.44
25	79.66	79.71	80.82	80.26	83.42	68.17	68.15	65.89	65.24	64.56	63.97	63.38
26	80.01	78.71	80.38	80.70	83.25	67.97	67.95	65.74	65.14	64.58	63.96	63.56
27	80.13	78.43	79.36	80.92	82.24	67.77	67.74	65.67	65.23	64.54	63.96	63.55
28	79.94	78.71	79.70	81.32	81.11	67.70	67.65	65.71	65.36	64.43	63.82	63.27
29	79.19		80.11	81.78	79.89	67.63	67.55	65.68	65.32	64.42	63.82	63.04
30	78.45		80.63	82.13	78.76	67.48	67.39	65.63	65.15	64.42	63.79	63.05
31	78.33		80.99		77.63		67.23	65.65		64.51		63.00

Sk 6. A. W. Rohn, Baraboo Iron Works. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 1, T. 11 N., R. 6 E. Drilled unused artesian well in sandstone, diameter 5 to 4 inches, depth 318 feet, cased to 266. Land-surface datum is 819 feet above msl. Highest water level 4.58 above lsd, Nov. 17, 1951; lowest 1.26 above lsd, Feb. 14, 1951. Records available: 1946-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	+2.35	Mar. 30	+3.16	June 30	+3.73	Oct. 13	+4.30
13	2.84	Apr. 7	3.96	July 7	4.03	19	4.16
19	2.75	13	4.15	14	3.85	27	4.11
27	2.56	20	4.09	21	4.31	Nov. 2	4.43
Feb. 3	2.80	28	4.34	27	4.06	10	4.57
8	2.66	May 4	4.11	Aug. 3	3.71	17	4.58
14	1.26	11	3.70	10	4.01	24	4.54
24	2.60	19	3.99	17	4.03	Dec. 8	4.51
Mar. 1	3.11	26	4.03	25	4.11	15	4.13
10	2.99	June 2	4.18	Sept. 1	4.01	22	4.41
17	3.10	9	4.10	22	4.17	29	4.49
22	3.01	14	4.09	Oct. 6	4.12		

Sk 9. Wisconsin Creamery Co. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 12, T. 9 N., R. 6 E. Drilled unused artesian well in sandstone, diameter 10 inches, reported depth 380 feet, cased to 160. Land-surface datum is 757 feet above msl. Highest water level 43.5 below lsd, June 7, 1950, July 20, 1951; lowest 51.4 below lsd, Jan. 4, 1950. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4, 1950	51.4	Dec. 15, 1950	49.0	Apr. 20, 1951	44.5	Sept. 27, 1951	49.0
June 7	43.5	Feb. 15, 1951	46.5	July 20	43.5	Nov. 29	49.0
Oct. 5	50.5						

Sk 11. Wilbur S. Grant. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 15, T. 10 N., R. 6 E. Drilled domestic stock artesian well in sandstone, diameter 8 to 6 inches, reported depth 625 feet, cased to 390. Land-surface datum is 859 feet above msl. Highest water level 86.25 below lsd, Nov. 29, 1951; lowest 89.58 below lsd, Apr. 20, 1951. Records available: 1948-51. Feb. 15, 89.39; Apr. 20, 89.58; July 20, 88.14; Sept. 27, 87.04; Nov. 29, 86.25.

Sk 12. Devils Lake State Park.  $NE_4^1 NW_4^1$  sec. 13, T. 11 N., R. 6 E. Drilled unused well, diameter 8 inches, depth 237 feet. Highest water level 124.65 below lsd, Oct. 20, 1951; lowest 128.08 below lsd, June 7, 1950. Records available: 1948-51. Oct. 20, 124.65.

Sk 13. University of Wisconsin Engineers Camp.  $SW_4^1 SW_4^1$  sec. 24, T. 11 N., R. 6 E. Drilled domestic water-table well in sand, diameter 8 inches, reported depth 106 feet, cased to 106. Land-surface datum is 968 feet above msl. Highest water level 33.22 below lsd, Apr. 29, 1949; lowest 38.27 below lsd, Oct. 29, 1948. Records available: 1948-49, 1951. Oct. 3, 35.26; Oct. 20, 34.72. Measurement discontinued.

Sk 14. Devils Lake State Park.  $SW_4^1 SE_4^1$  sec. 24, T. 11 N., R. 6 E. Drilled public-supply water-table well in sand, diameter 6 to 4 inches, depth 277 feet. Land-surface datum is 979 feet above msl. Highest water level 105.39 below lsd, Oct. 3, 1951; lowest 121.38 below lsd, Apr. 29, 1949. Records available: 1948-49, 1951. Oct. 3, 105.39.

Sk 15. Devils Lake State Park.  $SE_4^1 SW_4^1$  sec. 19, T. 11 N., R. 7 E. Drilled public-supply well, diameter 8 inches, reported depth 337 feet, cased to 315. Land-surface datum is 1,041 feet above msl. Highest water level 199.60 below lsd, June 11, 1948; lowest 204.49 below lsd, June 7, 1950. Records available: 1948-50. Measurement discontinued.

#### Sawyer County

Sw 7. Wisconsin Conservation Department.  $NE_4^1 SE_4^1$  sec. 28, T. 41 N., R. 9 W. Dug water-table well in gravel, diameter 8 inches, depth 25 feet. Land-surface datum is 1,190 feet above msl. Highest water level 15.16 below lsd, Apr. 21, 1951; lowest 17.31 below lsd, Oct. 23, 1948. Records available: 1937-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	16.91	Apr. 7	16.39	July 7	15.33	Oct. 13	16.08
13	16.94	14	15.53	17	15.20	20	16.16
20	16.94	21	15.16	21	15.51	27	16.19
27	16.95	28	15.24	28	15.79	Nov. 3	16.26
Feb. 3	16.95	May 5	15.30	Aug. 4	16.02	10	16.32
10	16.98	12	16.65	11	16.15	17	16.17
17	16.89	19	15.82	18	16.24	24	16.13
24	16.97	26	16.03	Sept. 1	16.23	Dec. 1	16.16
Mar. 3	16.83	June 2	15.84	8	16.17	8	16.22
10	16.80	9	15.70	15	15.97	18	16.36
17	16.81	16	15.79	22	15.82	22	16.38
24	16.81	23	15.93	29	15.88	22	16.42
31	16.76	30	15.70	Oct. 6	16.00		

#### Shawano County

Sh 1. Harry Sievert.  $NW_4^1 NW_4^1$  sec. 30, T. 26 N., R. 18 E. Drilled unused well in limestone, diameter 6 inches, depth 132 feet. Land-surface datum is 917 feet above msl. Highest water level 53.47 below lsd, Dec. 6, 1951; lowest 63.52 below lsd, Feb. 7, 1951. Records available: 1947-51. Feb. 7, 63.52; Apr. 13, 55.53; July 11, 57.84; Sept. 21, 58.91; Dec. 6, 53.47.

Sh 2. Shawano District School.  $SE_4^1 NE_4^1$  sec. 2, T. 26 N., R. 16 E. Drilled unused water-table well in limestone, diameter 5 inches, depth 85 feet. Land-surface datum is 999 feet above msl. Highest water level 39.05 below lsd, Dec. 6, 1951; lowest 53.84 below lsd, Feb. 9, 1950. Records available: 1947-51. July 11, 43.30; Sept. 21, 47.86; Dec. 6, 39.05.

Sh 3. George Martin.  $NE_4^1 NW_4^1$  sec. 2, T. 26 N., R. 16 E. Drilled unused water-table well in limestone, diameter 4 inches, depth 30 feet. Land-surface datum is 957 feet above msl. Highest water level 0.80 above lsd, Apr. 14, 1951; lowest 15.05 below lsd, Dec. 30, 1949. Records available: 1947-51.

Daily lowest water level, above and below lsd, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-14.76	-15.25	-15.53	.....	-3.21	.....	.....	-10.24	-11.19	-11.82	-9.73	-9.38
2	14.76	15.28	15.54	.....	3.33	.....	.....	10.27	11.20	11.77	9.73	9.38
3	14.76	15.28	15.51	.....	3.42	.....	.....	10.38	11.24	11.80	9.70	9.39
4	14.83	15.30	15.43	.....	3.60	.....	.....	10.43	11.26	11.81	9.80	9.40
5	14.86	15.32	15.43	.....	3.71	.....	.....	10.45	11.25	11.77	9.92	9.43
6	14.88	15.32	15.41	.....	3.85	.....	.....	10.44	11.26	11.69	9.93	9.43
7	14.88	15.33	15.38	.....	3.95	.....	.....	10.44	11.30	11.57	9.87	9.53
8	14.89	15.35	15.35	.....	4.00	.....	.....	10.49	11.30	11.46	9.84	9.59
9	14.90	15.36	15.32	.....	4.23	.....	.....	10.57	11.30	11.35	9.89	9.59
10	14.93	15.36	15.27	.....	4.30	.....	.....	10.60	11.25	11.34	10.04	9.59

## Sh 3--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	-14. 97	-15. 35	-15. 17	.....	-4. 40	.....	.....	-10. 67	-11. 32	-11. 28	-10. 08	-9. 48
12	14. 99	15. 40	15. 05	.....	4. 62	.....	-9. 28	10. 71	11. 33	11. 28	10. 02	9. 47
13	15. 00	15. 44	14. 92	+0. 39	4. 75	.....	9. 33	10. 75	11. 38	11. 28	9. 85	9. 58
14	14. 97	15. 46	14. 82	. 66	4. 85	.....	9. 37	10. 75	11. 44	11. 27	9. 82	9. 58
15	15. 00	15. 47	14. 74	. 45	4. 94	.....	9. 39	10. 77	11. 47	11. 24	10. 00	9. 64
16	15. 00	15. 47	14. 70	+. 10	5. 05	.....	9. 48	10. 79	11. 48	11. 32	10. 00	9. 65
17	15. 02	15. 47	14. 67	-. 27	5. 15	.....	9. 51	10. 83	11. 49	11. 37	9. 96	9. 65
18	15. 03	15. 46	14. 49	. 50	5. 25	.....	9. 55	10. 84	11. 50	11. 38	9. 80	9. 65
19	15. 05	15. 48	14. 18	. 96	5. 32	.....	9. 60	10. 84	11. 52	11. 41	9. 78	9. 66
20	15. 09	15. 49	13. 92	1. 31	5. 41	.....	9. 65	10. 83	11. 53	11. 39	9. 64	9. 60
21	15. 12	15. 50	13. 79	1. 40	5. 06	.....	9. 69	10. 87	11. 61	11. 28	9. 50	9. 56
22	15. 12	15. 52	13. 70	1. 73	5. 72	.....	9. 79	10. 93	11. 63	11. 24	9. 40	9. 71
23	15. 11	15. 54	13. 58	2. 02	5. 74	.....	9. 81	10. 97	11. 65	10. 92	9. 39	9. 83
24	15. 13	15. 54	13. 52	2. 19	5. 82	.....	9. 85	10. 98	11. 68	10. 46	9. 40	9. 88
25	15. 15	15. 54	13. 50	2. 33	5. 90	.....	9. 90	10. 98	11. 70	10. 23	9. 40	9. 87
26	15. 16	15. 54	13. 48	2. 50	5. 90	.....	9. 94	10. 99	11. 70	10. 04	9. 41	9. 92
27	15. 20	15. 55	13. 38	2. 56	6. 10	.....	10. 00	11. 00	11. 76	9. 86	9. 41	9. 93
28	15. 22	15. 55	-13. 35	2. 72	6. 23	.....	10. 05	11. 06	11. 83	9. 64	9. 35	9. 86
29	15. 24	.....	2. 93	6. 35	.....	10. 10	11. 09	11. 84	9. 64	9. 36	9. 78	
30	15. 25	.....	3. 09	.....	.....	10. 11	11. 10	11. 83	9. 57	9. 37	9. 88	
31	15. 25	.....	.....	.....	.....	10. 19	11. 16	.....	9. 70	.....	9. 88	

Sh 4. John Short. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 28, T. 25 N., R. 17 E. Drilled unused water-table well in limestone, diameter 4 inches, reported depth 50 feet. Highest water level 3.76 below lsd, Dec. 6, 1951; lowest 8.68 below lsd, Feb. 7, 1951. Records available: 1947-51. Feb. 7, 8.68; Apr. 13, 4.08; July 11, 5.04; Sept. 21, 6.65; Dec. 6, 3.76.

Sh 5. Lew and Sylvester Jarosinski. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 4, T. 25 N., R. 18 E. Drilled industrial well in limestone, diameter 6 inches, reported depth 99 feet. Highest water level 10.17 below lsd, Dec. 6, 1951; lowest 21.75 below lsd, Feb. 7, 1951. Records available: 1948-51. Feb. 7, 21.75; July 11, 15.37; Sept. 21, 16.52; Dec. 6, 10.17.

Trempealeau County

Tr 1. Mrs. William Davidson. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 35, T. 19 N., R. 8 W. Drilled unused well in sandstone, diameter 6 inches. Highest water level 137.63 below lsd, Apr. 19, 1951; lowest 142.39 below lsd, Sept. 28, 1949. Records available: 1947-51. Feb. 14, 141.10; Apr. 19, 137.63; July 19, 138.69; Sept. 26, 139.15; Nov. 28, 138.97.

Vernon County

Ve 4. Albert Storbakken. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 14, T. 14 N., R. 5 W. Drilled unused well, diameter 4 inches, depth 16 feet, cased to 16. Land-surface datum is 900 feet above msl. Highest water level 7.72 below lsd, Apr. 19, 1951; lowest 11.14 below lsd, Dec. 1, 1939. Records available: 1934-51. Feb. 14, 10.84; Apr. 19, 7.72; July 18, 9.63; Sept. 26, 10.01; Nov. 28, 9.88.

Ve 8. M. H. Willenberg. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 26, T. 14 N., R. 7 W. Dug unused well, diameter 30 inches, depth 44 feet, cased to 44. Land-surface datum is 710 feet above msl. Highest water level 44.00 below lsd, Feb. 26, 1944; lowest 51.52 below lsd, Jan. 8, 1942. Records available: 1934-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 27	50.39	May 29	50.41	Sept. 27	49.35	Nov. 21	49.32
Mar. 27	50.44	July 26	48.50	Oct. 30	49.33	Dec. 22	49.32
Apr. 27	50.42	Aug. 28	49.35				

Ve 9. Ferdinand Lenser. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 14, T. 14 N., R. 7 W. Dug unused well in sandstone, diameter 48 to 30 inches, depth 52 feet, cased to 52. Land-surface datum is 940 feet above msl. Highest water level 46.64 below lsd, June 15, 1948; lowest 49.39 below lsd, Apr. 8, 1942. Records available: 1934-51. Feb. 14, 48.74; Apr. 18, 47.34; July 18, 47.24; Sept. 26, 46.85; Nov. 28, 47.09.

Ve 14. Chris Benrud. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, T. 14 N., R. 4 W. Drilled unused well, diameter 4 inches, depth 24 feet. Highest water level 6.30 below lsd, May 26, 1945; lowest 7.88 below lsd, Aug. 2, 1941. Records available: 1935-51. Feb. 14, 7.70; Apr. 19, 6.52; July 18, 7.15; Sept. 26, 7.49; Nov. 28, 7.44.

Vilas County

Vi 3. Wisconsin Conservation Department. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 9, T. 41 N., R. 10 E. Driven unused water-table well in sand, diameter 2 inches, depth 20 feet. Land-surface datum is 1,658 feet above msl. Highest water level 9.01 below lsd, July 14, 1951; lowest 12.89 below lsd, Sept. 18, 1948. Records available: 1948-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	7.73	Mar. 31	7.37	June 23	6.65	Sept. 15	6.67
13	7.87	Apr. 7	7.49	30	5.88	22	6.65
20	7.92	14	6.27	July 7	5.46	29	6.56
27	7.94	21	6.34	14	9.01	Oct. 6	5.80
Feb. 3	7.92	28	6.06	21	5.93	13	6.31
10	7.91	May 5	6.02	28	6.32	20	6.03
17	7.85	12	5.77	Aug. 4	6.86	27	6.22
24	7.75	19	6.55	11	7.08	Nov. 3	6.47
Mar. 3	7.60	26	6.78	18	7.05	10	6.43
10	7.36	June 2	6.87	25	7.07	17	6.39
17	7.37	9	6.40	Sept. 1	7.12	24	6.34
24	7.37	16	6.75	8	6.91		

Vi 21. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 10, T. 40 N., R. 10 E. Driven unused water-table well in sand, diameter 1 $\frac{1}{4}$  inches, depth 28 feet, cased to 28, well point. Highest water level 12.56 below lsd, Dec. 3, 1951; lowest 16.86 below lsd, Mar. 21, 1949. Records available: 1944-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	15.59	Apr. 2	15.73	July 2	13.52	Oct. 1	13.33
8	15.61	9	15.44	9	13.43	8	13.06
15	15.65	16	14.76	16	13.38	15	12.76
22	15.67	23	14.54	23	13.32	22	12.70
31	15.72	30	14.38	30	13.27	29	12.62
Feb. 5	15.76	May 7	14.19	Aug. 7	13.29	Nov. 5	12.76
12	15.79	14	14.11	13	13.35	12	12.62
19	15.82	21	14.05	21	13.36	19	12.74
27	15.84	28	13.97	28	13.42	26	12.64
Mar. 6	15.85	June 5	13.89	Sept. 4	13.44	Dec. 3	12.56
12	15.88	11	13.78	10	13.49	10	12.56
21	15.90	19	13.67	11	13.38	18	12.69
26	15.92	26	13.57	24	13.52	27	12.81

Walworth County

Ww 1. Village of Genoa Junction. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 35, T. 1 N., R. 18 E. Drilled domestic public-supply artesian well in sandstone, diameter 12 to 10 inches, reported depth 1,080 feet, cased to 690. Land-surface datum is 829 feet above msl. Highest water level 24.98 below lsd, May 12, 1948; lowest 28.15 below lsd, Nov. 14, 1950. Records available: 1946-51. Jan. 23, 28.02; May 21, 26.20; July 24, 26.46; Oct. 3, 26.95; Dec. 11, 26.44.

Ww 2. G. Bergstrom. 201 Bonita St., Walworth. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 22, T. 1 N., R. 16 E. Drilled unused well, diameter 6 inches, depth 77 feet. Highest water level 64.03 below lsd, Aug. 26, 1946; lowest 67.71 below lsd, Feb. 6, 1950. Records available: 1946-51. May 21, 65.23. Measurement discontinued.

Ww 4. United Milk Products. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 33, T. 1 N., R. 15 E. Drilled unused artesian well in sandstone and limestone, diameter 6 inches, reported depth 626 feet, cased to 352. Land-surface datum is 997 feet above msl. Highest water level 45.32 below lsd, Dec. 11, 1951; lowest 58.79 below lsd, Dec. 5, 1949. Records available: 1946-51. Jan. 23, 57.88; May 21, 49.85; July 24, 49.24; Oct. 3, 49.34; Dec. 11, 48.32.

Ww 9. Arthur and Roy Stewart. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 33, T. 3 N., R. 15 E. Drilled stock well, diameter 6 inches, reported depth 287 feet, cased to 287. Highest water level 75.33 below lsd, Oct. 3, 1951; lowest 77.55 below lsd, Apr. 3, 1950. Records available: 1947-51. Jan. 23, 77.37; May 21, 75.70; July 24, 75.39; Oct. 3, 75.33; Dec. 11, 75.24.

Washburn County

Wb 1. Wisconsin Conservation Department. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 31, T. 39 N., R. 12 W. Driven unused water-table well in sand, diameter 1 $\frac{1}{4}$  inches, depth 18 feet. Land-surface datum is 1,065 feet above msl. Highest water level 3.13 below lsd, July 9, 1951; lowest 5.91 below lsd, Feb. 21, 1949. Records available: 1948-51.

## Wb 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	5.23	Apr. 9	5.21	July 9	3.13	Oct. 8	4.24
8	5.33	16	5.24	16	3.40	15	4.24
15	5.34	23	4.56	23	4.05	22	4.27
22	5.42	30	4.64	30	4.28	29	4.30
29	5.54	May 7	4.80	Aug. 6	4.33	Nov. 5	4.38
Feb. 5	5.55	14	4.96	13	4.51	12	4.36
12	5.34	21	4.95	20	4.40	19	4.35
17	5.38	28	4.65	27	4.30	26	4.48
26	5.21	June 4	4.80	Sept. 3	4.28	Dec. 3	4.54
Mar. 5	4.34	11	4.77	10	3.50	10	4.60
12	5.49	18	4.89	17	3.46	17	4.70
19	5.37	25	3.70	24	4.02	24	4.97
26	5.43	July 2	3.93	Oct. 1	4.05	31	4.86
Apr. 2	5.17						

Washington County

Wn 2. City of Hartford. Drilled unused artesian well in sandstone, diameter 16 inches, reported depth 600 feet. Land-surface datum is 980 feet above msl. Highest water level 29.41 below lsd, May 5, 1948; lowest 49.91 below lsd, Jan. 10, 1950. Records available: 1946-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	46.40	46.63	42.19	41.12	38.05	38.03	41.90	48.98	45.25	47.85	47.50	42.60
2	46.56	46.63	42.39	40.90	37.55	38.23	42.15	49.32	45.32	47.93	47.80	42.30
3	46.63	45.71	42.69	40.39	37.33	38.70	42.27	48.70	45.43	47.01	47.29	41.75
4	46.80	45.90	42.70	39.80	37.72	38.90	41.74	48.08	45.97	47.32	45.25	42.00
5	46.08	45.90	43.00	40.00	37.62	38.84	42.11	48.07	45.98	46.50	46.30	42.98
6	46.92	45.97	42.72	40.10	37.05	38.56	42.72	47.78	46.42	46.55	46.87	42.99
7	46.98	45.20	43.07	40.13	37.42	38.61	43.30	47.69	47.08	45.49	46.76	42.40
8	45.60	45.12	43.19	40.05	37.39	38.57	43.38	47.23	47.14	46.50	45.15	43.10
9	46.62	45.24	42.70	40.20	37.61	39.40	43.05	46.14	45.89	46.05	45.32	43.32
10	46.20	45.72	42.79	38.49	37.15	39.40	43.46	46.21	46.71	46.16	45.50	43.64
11	46.43	45.08	42.52	38.76	37.32	38.60	44.00	46.11	46.68	46.35	45.50	42.86
12	46.47	45.05	41.97	38.76	37.42	39.71	45.89	46.82	46.10	46.60	44.10	43.93
13	46.52	45.12	42.58	38.38	36.90	39.83	45.75	47.17	47.03	46.66	44.29	44.09
14	46.68	45.13	.....	38.55	37.62	39.75	45.40	46.43	47.11	46.68	44.31	44.10
15	46.11	43.80	.....	38.80	37.50	39.60	45.00	45.15	46.28	46.70	44.10	43.87
16	45.74	43.26	.....	38.56	37.90	39.72	46.03	44.30	46.40	47.20	44.57	43.94
17	46.97	44.07	.....	38.29	37.50	39.81	46.90	44.76	47.22	47.54	43.60	.....
18	47.00	43.83	.....	38.30	37.48	39.72	47.18	44.00	47.20	47.49	43.48	42.26
19	46.09	42.80	.....	37.99	37.51	39.28	47.38	44.97	46.42	47.00	43.54	42.42
20	45.93	41.98	.....	38.03	37.10	39.15	47.86	45.48	46.49	47.10	43.20	42.30
21	45.38	41.69	.....	38.05	37.30	38.71	47.86	45.50	46.99	47.19	43.74	.....
22	.....	41.70	42.78	38.11	37.55	38.95	47.09	45.50	47.54	46.30	43.81	.....
23	46.16	44.83	42.42	39.00	37.60	38.93	46.62	45.48	47.53	47.38	41.93	.....
24	46.31	45.11	42.98	39.25	37.56	38.99	46.85	45.49	46.17	47.50	43.05	.....
25	45.79	45.21	42.42	39.26	37.52	39.88	47.22	45.08	47.05	47.22	43.10	.....
26	45.67	43.91	42.48	38.11	37.50	40.29	47.76	45.12	47.07	47.28	42.79	.....
27	45.71	43.59	42.75	38.20	37.93	40.51	47.98	45.15	47.53	47.53	43.10	41.37
28	45.73	42.70	42.41	38.28	38.07	41.12	48.10	45.55	47.55	47.53	43.00	41.01
29	.....	41.91	38.29	37.87	41.25	48.12	45.99	46.95	46.71	43.58	40.96	.....
30	.....	41.90	38.00	37.78	41.62	48.40	45.80	47.19	46.40	43.63	40.62	.....
31	45.18	41.23	.....	38.03	.....	48.82	45.16	.....	46.18	.....	.....	.....

Wn 3. City of West Bend. City Hall. Drilled unused artesian well in sandstone and limestone, diameter 8 inches, reported depth 1,200 feet, cased to 75. Land-surface datum is 920 feet above msl. Highest water level 12.32 below lsd, Dec. 12, 1951; lowest 19.88 below lsd, Aug. 14, 1947. Records available: 1946-51. Jan. 25, 14.94; May 25, 14.34; July 25, 15.19; Oct. 1, 14.38; Dec. 12, 12.32.

Waukesha County

Wk 2. Sisters of Notre Dame. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 24, T. 7 N., R. 20 E. Drilled unused well in sandstone, diameter 16 to 10 inches, reported depth 1,182 feet, cased to 203. Land-surface datum is 762.92 feet above msl. Recording gage removed June 19, 1951. Highest water level 64.88 below lsd, May 4, 1951; lowest 85.16 below lsd, Sept. 4, 1948. Records available: 1946-51.

Wk 2--Continued.

Daily lowest water level from recorder graph\*

Day	Jan.	Feb.	Mar.	Apr.	May	June	Aug.	Sept.	Nov.
1	71.41	70.98	69.61	67.63	.....	.....	.....	.....	.....
2	71.37	.....	69.51	67.50	65.59	.....	.....	.....	.....
3	71.06	.....	69.30	67.59	65.37	.....	.....	.....	.....
4	71.50	.....	69.39	67.57	65.67	.....	.....	.....	.....
5	71.43	71.03	69.36	67.59	66.01	68.21	.....	.....	.....
6	.....	70.76	69.30	67.28	65.87	68.02	.....	.....	.....
7	71.43	.....	69.24	66.87	65.76	.....	h71.43	.....	.....
8	71.42	.....	69.11	66.59	65.77	.....	.....	.....	.....
9	71.34	.....	69.24	.....	65.92	.....	.....	.....	.....
10	71.28	.....	69.20	.....	65.95	.....	.....	.....	.....
11	71.36	.....	69.14	66.92	65.58	.....	.....	.....	.....
12	71.35	.....	68.93	66.43	65.81	68.13	.....	.....	.....
13	71.33	.....	68.55	66.37	66.01	67.88	.....	.....	.....
14	71.05	.....	68.79	66.31	66.13	68.15	.....	.....	.....
15	71.31	71.64	68.82	66.54	66.27	68.25	.....	.....	.....
16	71.13	71.38	.....	66.42	66.55	68.28	.....	.....	.....
17	71.01	71.44	.....	66.29	66.26	68.20	.....	.....	.....
18	71.02	71.42	68.99	66.32	66.23	68.96	.....	.....	.....
19	70.72	71.39	69.00	66.58	.....	68.63	.....	.....	.....
20	71.13	71.0	68.92	66.45	.....	.....	.....	.....	.....
21	71.33	.....	68.87	66.29	.....	.....	.....	.....	.....
22	71.14	.....	68.75	66.37	.....	.....	.....	.....	.....
23	70.98	.....	68.54	66.51	66.93	.....	.....	.....	.....
24	71.02	.....	68.70	66.43	66.75	.....	.....	.....	.....
25	71.12	.....	68.85	65.87	66.80	.....	.....	.....	.....
26	70.97	.....	68.63	65.94	66.57	.....	.....	.....	.....
27	71.18	.....	68.51	65.68	66.68	.....	h69.08	h67.40	.....
28	71.34	.....	68.20	65.53	66.88	.....	.....	.....	.....
29	.....	.....	67.76	65.64	66.98	.....	.....	.....	.....
30	.....	.....	67.50	.....	.....	.....	.....	.....	.....
31	.....	.....	67.60	.....	.....	.....	.....	.....	.....

\* No record for July, Oct., and Dec.

h Tape measurement.

Wk 3. Village of Menomonee Falls. NW $\frac{1}{4}$  NE $\frac{1}{4}$  sec. 10, T. 8 N., R. 20 E. Drilled public-supply artesian well in sandstone and limestone, diameter 12 inches, reported depth 1, 140 feet. Land-surface datum is 784.65 feet above msl. Highest water level 20.37 below lsd, Apr. 6, 1948; lowest 49.77 below lsd, Nov. 15, 1950. Records available: 1946-51. Jan. 24, 29.46. Measurement discontinued.

Wk 14. Veterans Administration Hospital, Waukesha. Drilled unused artesian well in sandstone, diameter 8 inches, reported depth 1, 300 feet. Land-surface datum is 875.03 feet above msl. Highest water level 249.86 below lsd, July 6, 1947; lowest 308.00 below lsd, Sept. 21, 1951. Records available: 1946-51.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	298.74	302.73	303.92	301.48	302.55	303.48	305.95	.....	305.97	305.00	306.20	304.72
2	297.88	302.92	304.02	299.93	302.90	303.48	303.90	.....	304.70	305.60	306.32	304.42
3	301.20	303.00	303.58	301.74	304.07	302.47	305.01	.....	304.91	306.83	306.30	304.22
4	299.72	301.59	301.10	301.38	303.85	301.54	303.24	.....	304.02	307.01	305.55	304.57
5	301.78	300.75	300.30	303.30	303.59	301.54	303.03	306.20	304.20	307.13	305.40	304.30
6	300.52	300.59	300.40	302.80	303.73	303.30	303.58	304.65	306.13	307.33	305.48	305.17
7	299.70	302.43	303.47	302.15	.....	303.47	303.15	305.70	306.81	305.22	306.44	305.59
8	300.05	302.82	303.35	301.90	.....	304.38	303.44	305.50	306.81	304.72	306.51	305.21
9	300.44	302.48	304.49	300.45	303.81	305.12	302.20	305.60	305.78	306.70	306.59	305.20
10	301.20	303.16	304.18	300.49	303.95	303.50	302.73	306.91	304.31	306.63	306.75	303.63
11	302.97	300.46	303.12	302.33	304.03	303.29	302.60	306.98	305.00	306.68	304.17	304.44
12	302.61	299.65	301.80	302.30	304.02	303.37	304.10	306.97	306.41	306.29	302.70	306.13
13	301.91	302.31	301.10	301.80	302.02	304.40	305.06	304.80	307.03	307.20	303.95	306.41
14	300.86	303.18	302.91	302.69	301.90	305.65	305.06	304.88	307.10	303.65	305.07	305.82
15	300.15	303.14	303.05	300.87	301.90	306.60	304.63	304.65	307.69	304.60	305.58	.....
16	299.65	303.62	302.47	301.25	303.71	306.04	303.80	305.55	304.58	305.53	307.31	.....
17	301.62	302.74	303.48	300.90	304.01	306.05	304.75	305.86	305.14	306.98	306.60	.....
18	301.97	301.80	301.48	302.50	303.50	303.68	306.10	305.83	306.70	307.25	306.20	.....
19	301.56	301.48	301.59	303.03	304.02	305.40	306.60	304.67	307.30	307.27	305.49	306.16
20	302.16	302.34	301.12	303.00	301.11	306.62	307.90	303.23	307.36	307.30	305.56	306.19

## Wk 14--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	301.23	302.23	303.16	303.18	301.80	307.20	307.55	303.12	308.00	303.74	305.66	306.57
22	299.12	303.61	303.06	300.40	303.72	305.90	307.57	304.87	306.90	304.20	306.60	.....
23	301.19	303.60	302.60	300.90	303.90	306.40	306.48	305.02	306.40	305.78	306.00	.....
24	301.98	302.39	303.70	302.64	303.92	303.22	306.81	305.00	305.60	306.16	306.04	305.75
25	301.96	301.30	300.58	302.68	304.48	304.88	307.15	305.21	306.49	306.15	305.24	303.95
26	302.97	301.53	302.28	302.50	302.89	305.30	.....	302.07	306.50	307.15	303.05	302.68
27	302.23	301.55	301.98	303.62	301.60	305.55	.....	302.60	307.47	304.80	305.04	304.66
28	301.77	303.13	301.40	302.38	302.40	307.31	.....	304.50	307.15	303.50	304.01	304.51
29	302.29	.....	303.13	301.50	302.90	307.72	.....	304.60	307.20	304.14	304.04	304.30
30	302.18	.....	302.87	301.62	302.60	307.73	.....	304.80	306.00	304.82	305.69	304.13
31	302.06	.....	302.20	.....	303.10	.....	307.20	306.65	.....	304.52	.....	302.42

Wk 20. G. W. Aepler. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, T. 7 N., R. 17 E. Drilled irrigation artesian well in sandstone and limestone, diameter 10 inches, reported depth 773 feet, cased to 187. Land-surface datum is 866 feet above msl. Highest water level 25.70 below lsd, July 3, 1947; lowest 32.36 below lsd, Aug. 25, 1948. Records available: 1946-51. Jan. 25, 31.29; May 25, 29.40; July 25, 30.72; Oct. 8, 28.66; Nov. 6, 30.64; Dec. 12, 28.90.

Wk 22. Mrs. Bartholomew. 112 Maple Avenue, Big Bend. Drilled domestic artesian well in limestone, diameter 6 inches, reported depth 109 feet. Land-surface datum is 813 feet above msl. Highest water level 23.90 below lsd, May 12, 1948; lowest 29.93 below lsd, June 6, 1949. Records available: 1946-51. Jan. 23, 21.39; May 21, 25.94; June 6, 25.07; July 24, 26.12; Sept. 18, 26.24; Nov. 14, 26.11.

Wk 29. Riviera Tavern. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 14, T. 7 N., R. 18 E. Drilled domestic artesian well in sandstone and limestone, diameter 6 to 4 inches, reported depth 475 feet, cased to 192. Land-surface datum is 883 feet above msl. Highest water level 51.53 below lsd, Sept. 11, 1946; lowest 75.20 below lsd, Aug. 25, 1948. Records available: 1946-51. May 25, 71.39; Aug. 6, 72.72; Oct. 1, 69.42; Nov. 26, 68.10.

Wk 31. Fulton Farms. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 5 N., R. 19 E. Drilled unused artesian well in limestone, diameter 6 inches, reported depth 600 feet. Land-surface datum is 963 feet above msl. Highest water level 130.22 below lsd, June 20, 1951; lowest 134.79 below lsd, Mar. 2, 1950. Records available: 1947-51.

## Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	134.02	132.35	131.26	130.72	130.42	130.73	130.92	133.18	131.33	130.98
2	.....	.....	134.02	132.35	131.27	130.55	130.47	130.70	130.95	131.15	131.33	130.98
3	.....	.....	133.74	132.31	131.17	130.53	130.45	130.82	130.96	131.15	131.24	130.94
4	134.27	.....	133.70	132.24	131.06	130.57	130.43	130.82	130.99	131.18	131.28	130.92
5	134.27	.....	133.69	132.25	131.02	130.55	130.55	130.82	130.97	131.29	131.37	130.89
6	134.31	.....	133.55	132.19	131.04	130.48	130.53	130.72	130.95	131.13	131.37	130.90
7	134.31	.....	133.46	132.01	131.00	130.43	130.48	130.63	131.01	131.25	131.20	131.14
8	134.22	134.46	133.39	131.96	130.93	130.39	130.40	130.64	131.02	131.27	131.24	131.10
9	134.19	134.54	133.41	131.96	130.93	130.41	130.40	130.71	130.98	131.29	131.27	131.08
10	134.25	134.51	133.36	131.97	130.89	130.35	130.51	130.71	130.88	131.32	131.31	131.06
11	134.30	134.41	133.25	131.99	130.79	130.37	130.59	130.79	130.97	131.33	131.31	.....
12	134.34	134.44	133.13	131.82	130.82	130.33	130.52	130.82	130.99	131.36	131.27	.....
13	134.34	134.60	132.93	131.77	130.87	130.34	130.53	130.80	131.01	131.37	131.12	131.10
14	134.30	134.64	132.80	131.75	130.86	130.37	130.57	130.79	131.08	131.34	131.06	131.10
15	134.28	134.61	132.82	131.81	130.83	130.34	130.52	130.74	131.11	131.30	131.16	131.13
16	134.29	134.50	132.86	131.82	130.80	130.32	130.60	130.75	.....	131.36	131.20	131.13
17	134.27	134.45	132.86	132.82	130.76	130.34	130.58	130.78	.....	131.36	131.20	131.13
18	134.29	134.45	132.81	131.77	130.80	130.37	130.53	130.76	.....	131.35	131.18	.....
19	131.31	134.41	132.76	131.76	130.73	130.35	130.54	130.76	131.14	131.36	131.17	.....
20	134.43	134.41	132.77	131.80	130.68	130.35	130.57	130.74	131.13	131.32	131.16	130.91
21	134.50	134.44	132.77	131.74	130.72	130.42	130.52	130.78	131.12	131.19	131.03	130.92
22	134.50	134.44	132.74	131.62	130.77	130.34	130.55	130.84	.....	131.29	130.99	131.05
23	134.30	134.48	132.63	131.69	130.82	130.36	130.61	130.88	.....	131.38	131.01	131.13
24	134.33	134.40	132.72	131.62	130.72	130.39	130.62	130.87	.....	131.24	131.09	131.17
25	134.39	134.28	132.73	131.54	130.66	130.45	130.70	130.86	131.18	131.27	131.08	131.13
26	134.38	134.13	132.73	131.54	130.57	130.35	130.69	130.81	131.16	131.27	131.07	131.25
27	134.41	134.20	132.63	131.50	130.67	130.35	130.67	130.78	131.18	131.27	131.07	131.25
28	.....	134.19	132.55	131.35	130.67	130.38	130.70	130.84	131.28	131.19	131.03	131.14
29	.....	.....	132.49	131.26	130.70	130.49	130.70	130.85	131.29	131.21	131.04	131.01
30	.....	.....	132.76	131.26	130.84	130.40	130.68	130.87	131.21	131.16	131.02	131.03
31	.....	.....	132.26	.....	130.78	.....	130.66	130.92	.....	131.27	.....	131.03

Wk 32. Western United Dairy Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 23, T. 5 N., R. 18 E. Drilled unused artesian well in limestone, depth 189 feet, cased to 100. Highest water level 44.95 below lsd, May 21, 1951; lowest 47.84 below lsd, Feb. 6, 1950. Records available: 1947-51. Jan. 23, 47.44; May 21, 44.95; July 24, 45.06; Oct. 2, 45.73; Dec. 11, 45.31.

Wk 34. A. N. McGeoch Co. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 19, T. 5 N., R. 18 E. Drilled domestic artesian well in sandstone, diameter 6 inches, reported depth 618 feet, cased to 255 feet. Land-surface datum is 895 feet above msl. Highest water level 32.84 below lsd, May 12, 1948; lowest 38.93 below lsd, Dec. 5, 1949. Records available: 1947-51. Jan. 23, 37.00; May 21, 33.08; July 24, 33.96; Oct. 2, 35.96; Dec. 11, 34.11.

Wk 86. Gray. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, T. 7 N., R. 19 E. Drilled domestic artesian well in limestone, diameter 6 inches, reported depth 120 feet. Land-surface datum is 893 feet above msl. Highest water level 31.69 below lsd, May 21, 1951; lowest 34.64 below lsd, Sept. 28, 1950. Records available: 1950-51. Aug. 17, 1950, 33.86; Sept. 28, 1950, 34.64; May 21, 1951, 31.69; June 26, 1951, 31.86; Aug. 6, 1951, 32.71; Oct. 15, 1951, 34.05; Dec. 12, 1951, 31.34.

#### Waupaca County

Wp 2. Village of Fremont. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 26, T. 21 N., R. 13 E. Drilled unused artesian well in sandstone, diameter 8 inches, reported depth 205 feet, cased to 109. Highest water level 10.81 below lsd, Apr. 23, 1951; lowest 14.80 below lsd, Jan. 11, 1951. Records available: 1950-51.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	14.80	Apr. 11	11.36	June 10	12.64	Aug. 12	13.54
Feb. 28	13.34	23	10.81	25	12.93	Sept. 30	13.71
Mar. 16	14.29	May 2	11.27	July 8	13.07	Oct. 29	13.04
Apr. 3	12.76	19	12.27	20	13.11		

Wp 4. E. H. Christensen. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 33, T. 21 N., R. 11 E. Driven unused water-table well in sand, diameter 1 $\frac{1}{4}$  inches, depth 24 feet. Highest water level 7.15 below lsd, July 17, 1951; lowest 10.68 below lsd, Jan. 20, 1951. Records available: 1950-51. Measurement discontinued.

Jan.	5	10.57	Apr.	2	9.54	Apr.	21	7.90	May	20	7.92
	20	10.68		8	8.72		May 6	7.40	June 11		7.22
	Mar. 25	10.40		15	8.16		13	7.38	July 17		7.15

#### Waushara County

Ws 1. University of Wisconsin Experiment Farm. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 15, T. 19 N., R. 8 E. Driven unused water-table well, diameter 1 $\frac{1}{4}$  inches, well point. Highest water level 5.23 below lsd, June 14, 1947; lowest 11.51 below lsd, Feb. 27, 1951. Records available: 1947-51.

Feb. 27	11.51	May 29	8.52	July 9	8.33	Aug. 27	8.32
Apr. 5	10.68	June 4	8.49	17	8.25	Sept. 4	8.44
16	9.77	12	8.47	23	8.20	13	8.51
May 1	9.04	18	8.43	30	8.22	25	8.62
7	8.85	25	8.47	Aug. 7	8.22	Oct. 22	8.82
14	8.66	July 2	8.46	16	8.25	Nov. 30	8.75
21	8.59						

Ws 3. Follett. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 5, T. 18 N., R. 8 E. Driven unused water-table well, diameter 2 inches, reported depth 70 feet. Highest water level 54.22 below lsd, Aug. 28, 1951; lowest 56.29 below lsd, Mar. 5, 1951. Records available: 1949-51. Mar. 5, 56.29; Apr. 30, 56.16; July 10, 54.70; Aug. 28, 54.22; Oct. 31, 54.36.

Ws 4. Village of Hancock. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 10, T. 19 N., R. 8 E. Dug unused water-table well, diameter 6 feet, reported depth 25 feet. Highest water level 8.31 below lsd, July 10, 1951; lowest 11.21 below lsd, Mar. 5, 1951. Records available: 1950-51. Jan. 25, 11.14; Mar. 5, 11.21; Apr. 30, 8.72; July 10, 8.31; Aug. 28, 9.40; Oct. 31, 8.70.

Ws 7. U. S. Geol. Survey. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 10, T. 20 N., R. 8 E. Driven unused water-table well, diameter 1 $\frac{1}{4}$  inches, depth 17 feet. Highest water level 10.32 below lsd, July 15, 1951; lowest 14.61 below lsd, Mar. 5, 1951. Records available: 1950-51.

Jan. 2	14.03	Feb. 5	14.25	Mar. 5	14.61	Apr. 9	12.47
8	14.08	7	14.25	12	14.51	16	11.78
15	14.18	20	14.28	20	14.46	23	11.26
22	14.24	26	14.36	26	14.41	30	10.95
30	14.30	Mar. 5	14.58	Apr. 3	12.37	May 8	10.69

Ws 7--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 14	10.65	July 15	10.32	Sept. 18	11.10	Nov. 12	10.90
21	10.68	23	11.36	24	11.18	19	11.03
28	10.75	31	10.50	11.27	26	10.94	
June 4	10.84	Aug. 6	10.57	Oct. 1	11.32	Dec. 3	10.89
11	10.76	13	10.75	8	11.34	10	10.99
17	10.81	20	10.72	15	11.34	17	11.12
26	10.85	27	10.79	22	11.31	25	11.26
July 2	10.96	Sept. 4	10.93	Nov. 5	11.01	31	11.26
9	11.01	10	10.93		10.98		11.32

Ws 8. University of Wisconsin Experiment Farm, Hancock. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 15, T. 19 N., R. 8 E. Jetted unused well in sand and gravel, diameter 4 inches, depth 18 feet. Highest water level 7.78 below lsd, July 24, 1951; lowest 9.48 below lsd, May 16, 1951. Records available: 1951.

## Daily lowest water level from recorder graph\*

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.65	8.18	8.10	8.71	8.11	8.40	8.50	8.40
2	8.59	8.18	8.10	8.68	8.13	8.41	8.45	8.39
3	8.56	8.16	8.10	8.75	8.18	8.42	8.43	8.37
4	8.56	8.90	8.09	8.69	8.18	8.44	8.46	8.38
5	8.53	8.12	8.10	8.00	8.18	8.47	8.49	8.38
6	8.50	8.08	8.10	7.88	8.20	8.48	8.48	8.37
7	8.44	8.53	8.07	7.84	8.20	8.49	8.41	8.40
8	8.78	8.06	8.04	7.85	8.20	8.49	8.40	8.41
9	8.42	8.57	8.01	8.96	8.20	8.50	8.40	8.40
10	8.37	8.56	7.98	8.72	8.20	8.50	8.42	8.40
11	8.37	8.81	7.95	8.60	8.22	8.50	8.42	8.38
12	8.35	8.76	7.93	8.08	8.24	8.51	8.40	8.40
13	8.32	8.08	7.91	8.02	8.25	8.52	8.36	....
14	9.29	8.05	7.90	8.02	9.39	8.51	8.39	....
15	9.15	8.42	7.90	8.01	8.25	8.52	8.44	....
16	9.48	8.01	8.40	8.01	8.28	8.55	8.48	....
17	8.37	8.01	8.60	8.01	8.28	8.56	8.49	....
18	9.01	8.76	8.50	8.03	8.29	8.58	8.48	....
19	9.02	8.09	7.88	8.03	8.29	8.58	8.50	....
20	8.30	8.05	8.49	8.03	8.29	8.57	8.48	....
21	9.06	8.05	7.83	8.06	9.02	8.56	8.41	....
22	8.99	8.05	7.84	8.08	8.33	8.60	8.41	8.54
23	8.42	8.05	7.83	8.09	8.35	8.60	8.43	8.56
24	8.91	8.09	8.45	8.10	9.01	8.60	8.45	8.58
25	9.05	8.10	8.52	8.09	9.10	8.60	8.45	8.58
26	8.24	8.10	8.69	8.08	8.35	8.58	8.43	8.60
27	8.19	8.06	8.56	8.08	8.38	8.58	8.43	8.60
28	8.19	8.07	8.62	8.07	8.39	8.52	8.40	8.55
29	8.18	8.07	8.44	8.08	8.39	8.52	8.40	....
30	8.18	8.07	8.60	8.09	8.40	8.51	8.40	....
31	8.18		8.69	8.11		8.55		....

\* No record for Jan., Feb., Mar., and Apr.

Ws 9. University of Wisconsin Experiment Farm, Hancock. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 15, T. 19 N., R. 8 E. Jetted well in sand and gravel, diameter 4 inches, depth 18 feet. Highest water level 15.61 below lsd, Aug. 2, 1951; lowest 16.50 below lsd, May 1, 1951. Records available: 1951.

## Daily lowest water level from recorder graph\*

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.50	15.97	15.93	15.62	15.80	16.10	16.31	16.19
2	16.50	15.97	15.94	15.62	15.81	16.09	16.30	16.19
3	16.47	15.96	15.94	15.64	15.84	16.12	16.24	16.18
4	16.44	15.98	15.94	15.65	15.84	16.13	16.28	16.17
5	16.44	15.98	15.95	15.65	15.84	16.14	16.28	16.17
6	16.44	15.98	15.95	15.64	15.85	16.16	16.23	16.16
7	16.38	15.98	15.95	15.63	15.87	16.17	16.22	16.16
8	16.36	15.97	15.91	15.62	15.87	16.17	16.20	....
9	16.36	15.97	15.91	15.65	15.87	16.19	16.21	....
10	16.32	15.96	15.90	15.65	15.87	16.20	16.22	....

